2019 AMENDMENT
ADOPTED NOVEMBER 25, 2019
ORD. 23-19

CITY OF BUCKLEY
GRANT NO. SEASMP-1719-BUCKLE-00006

SHORELINE MASTER PROGRAM
For Shorelines in the City of Buckley: White River

Prepared for:

City of Buckley
Building and Planning Division
P.O. Box 1960
Buckley, WA 98321

Prepared by:

THE WATERSHED COMPANY
and
750 Sixth Street South
Kirkland . WA 98033
p 425.822.5242
f 425.827.8136
watershedco.com

City of Buckley
Building and Planning Division
P.O. Box 1960
Buckley, WA 98321

This report was funded through a grant from the Washington Department of Ecology.

Originally passed July 23, 2012
Updated version passed: July 23, 2019,
Under Ordinance 15-19

The Watershed Company
Reference Number: 090514
Watershed Co. Contact Persons:
Dan Nickel
Mark Daniel

11/26/2019 3:24 PM

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1 INTRODUCTION

1.1 Background

The White River shoreline within the City of Buckley (City) extends from the City boundary east of the Washington State Rainier School to a point west of the Wickersham Basin. By statute, "shorelines" include certain water areas of the state (in our case, the White River), and "shorelands" minimally include "those lands extending landward for two hundred feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward two hundred feet from such floodways; and all wetlands ... associated with the streams ... which are subject to the provisions of this chapter; the same to be designated as to location by the Department of Ecology." (RCW 90.58.030(2)(d)). The informal term "uplands" is sometimes used for "shorelands," but without a distance limitation. In other words, "upland" can be any distance from the shoreline.

The majority of the shorelands within the City limits are publicly owned, primarily by the City. The remaining portions are owned either by Puget Sound Energy (PSE), Washington State Department of Health and Social Services (DSHS) or Cascade Water Alliance (CWA).

The White River shoreline and associated shorelands include three distinct areas or reaches:

1. **Reach 1**. This section of the City's shoreline extends along the south bank of the White River from the eastern City boundary approximately 800 feet to the barrier dam. This reach includes 3,481 linear feet of the river and 33.3 acres of shorelands.

   The area is nearly completely forested, and contains wetlands, pastureland, and institutional development. This area is affected most by the Mud Mountain Dam to the east.

2. **Reach 2**. This section of the river extends from the end of Reach 1 at the barrier dam and contains 1,332 linear feet of shoreline and 6.3 acres of shorelands. Most of the land in this area is owned by CWA, which purchased the barrier dam and flume in 2009.

   The area contains about 32 percent vegetative cover and the mouth of the flume, which transports water from the White River to Lake Tapps.

3. **Reach 3**. This is the longest section of the City's shoreline and contains the SR 410 White River overpass into King County. This reach contains 11,257 linear feet of shoreline and 106.9 acres of shorelands.

   This area is the least affected by human activities and contains wetlands. The City owns a majority of the shoreline parcels, including the old Hwy. 5 right-of-way, which is used as an informal park.

1.2 The Shoreline Planning Process

The 1999 Shoreline Master Program (SMP) was the City's first comprehensive shoreline program containing goals, policies, and regulations related to the protection of the valuable natural resources of the City's shoreline, while fostering all appropriate uses. The previous plan (1975) that the City adopted was the Pierce County SMP, which did not contain any additional data for environment designations for the White River shoreline within City boundaries as they existed at the time.

All Shoreline Master Programs must be consistent with the values, policies and regulations stated in the Shoreline Management Act as well as the Growth Management Act. Accordingly, several elements need to be addressed in this SMP, including the incorporation of new science and the development of a shoreline restoration plan.

1.3 Economic Development

The state, through its passage of RCW 43.21H State Economic Policy, recognizes the importance of considering economic values along with environmental, social, health, and safety considerations as each city or agency promulgates rules.

The City's economic development goals can be found in the Buckley Comprehensive Plan and SMP Section 3.2.

1.4 History and Objectives of the SMA

In 1969, the Washington State Supreme Court decided in the case of Wilbur v. Gallagher (77 Wn 2d 302), commonly known as the "Lake Chelan Case," that certain activities along shorelines were contrary to the public interest. The court findings required that the public interest be represented in the proper forum for determining the use of shoreline properties. The ramifications of this decision were significant in that developers, environmentalists and other interested parties began to recognize, although probably for different reasons, the need for a comprehensive planning and regulatory program for shorelines.

Wilbur v. Gallagher was a case primarily involving property rights. It was decided at a time of heightened environmental awareness. Federal legislative committees were hearing the beginnings of what eventually became the National Environmental Policy Act of 1969. "Earth Day" and the concept of "spaceship earth" were part of the American scene. "Conservationists" had become "environmentalists" and some had even gone so far as to call themselves "ecologists." Whatever the name or concept, concern for fragile ecological areas became important, along with the rights of property ownership.

Voters of the state, seeing the failure of the Seacoast Management Bill in the state legislature, validated an initiative petition commonly titled the "Shoreline Protection Act." The state legislature, choosing between adoption of the peoples' initiative petition or its own alternative, passed into law the "Shoreline Management Act of 1971" (SMA), effective June 1, 1971, which contained the provision for both statutes to be deferred to the electorate in the November 1972 election. The election issue required that voters respond to two questions: (1) did they favor shoreline management; and (2) which alternative

management program did they prefer. Most Washington voters favored both shoreline management and the legislature's alternative by an approximate 2 to 1 margin. It is important to keep in mind that the SMA was a response to a peoples' initiative and was ratified by the voters, giving the Act a populist foundation as well as an environmental justification.

The overarching goal of the SMA is "to prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines." With this clear mandate, the provisions of the SMA established a planning and regulatory program, which is initiated at the local level under state guidance (primarily via the SMP Guidelines, which are state standards that local governments must follow in drafting their SMPs). This cooperative effort balances local and state-wide interests in the management and development of shoreline areas by requiring local governments to write SMPs and regulate (through permitting) shoreline development. Local government actions are monitored by the Department of Ecology, which approves new or amended SMPs, reviews substantial development permits and approves conditional use permits and variances.

Since passage of the SMA, state law related to the SMA has continued to evolve. The state legislature directed Ecology in 1995 to update the SMP Guidelines, which had not been revised since 1972 and did not account for advancements in science and shoreline management practices, nor the recent passage of Washington's Growth Management Act. Ecology proposed a first draft in 1999 and adopted a substantially revised draft in 2000 that was challenged in court. Then Governor Gary Locke and former Attorney General Christine Gregoire co-sponsored a year-long mediation effort in 2002 that culminated in a third draft, which was issued for public comment in July 2002. That proposal had the endorsement of all of the parties to the lawsuit, including the Association of Washington Business (representing a coalition of business organizations, cities and counties), the Washington Aggregates & Concrete Association, the Washington Environmental Council and other environmental organizations, all of whom were parties to the lawsuit. The final version was adopted December 17, 2003 and became effective January 17, 2004.

Ecology continually amends the Guidelines in response to changes in state statute.

1.5 The Shoreline Management Act's Legal Foundation

The Shoreline Management Act of 1971, Chapter 90.58 RCW, is the authority for the enactment and administration of this SMP.

The authority to carry out the provisions of the SMA is derived directly from the Washington State Constitution and from the common law principle known as the Public Trust Doctrine.

The Washington State Constitution and the U.S. Constitution provide both the authority for conducting the activities necessary to carry out the SMA and significant limitations on that authority.

The basic authority comes from the police power provision. This allows the state government and, by delegation from the state, local government, to adopt and enforce laws to protect the public health, safety and general welfare.

Limitations come in the form of the due process provisions. Government activities that constrain private options have to be conducted according to a set of rules that assures an opportunity for participation by the affected parties. The SMA and this SMP comply with this requirement by establishing extensive rules for general public and individual participation in the process of making the rules (i.e. adopting and amending the SMP) and deciding on individual permits.

1.6 Applicability of the Shoreline Master Program

The SMA established a process for managing the state's shorelines through locally administered SMPs with oversight and support from the state. All proposed uses, activities, and development occurring within shoreline jurisdiction must conform to the intent and requirements of this SMP, as well as the SMA (Chapter 90.58 RCW), whether or not a permit or other form of authorization is required.

A SMP is defined as "… the comprehensive use plan for a described area, and the use regulations together with maps, diagrams, charts, or other descriptive material and text, a statement of desired goals, and standards developed in accordance with the policies enunciated in RCW 90.58.020….." (RCW 90.58.030(3)(c)).

The city will conduct periodic review process consistent with requirements of RCW 90.58.080 and WAC 173-26-090.

1.7 Relationship of this SMP to other Regulatory Programs

State and federal agencies have interest in the White River because of authorities given by several different state and federal laws. This leaves the applicant delving into and applying for permits required under local regulations, state regulations, and federal laws. The city may assist an applicant in local regulations, but the applicant is responsible to communicate with representatives from the other agencies.

A. Inter-governmental Coordination

Shoreline management is a combination of efforts from many entities. The U.S. Army Corps of Engineers is interested in any fill or bulkhead, the Department of Fish and Wildlife is interested in habitat and wildlife, and the Department of Ecology is interested in the natural functions of the shoreline and water quality. Tribes are interested in protecting their history and heritage along the river, and the City is interested in maintaining the natural habitat and making the riverfront a place for citizens to learn about nature and the river's natural and historic functions.

Each entity with regulatory jurisdiction has its policies, goals, and regulations that place particular requirements on the shoreline, making the shoreline one of the most challenging areas to develop and/or review. Each development proposal may need not

only to have the City's review and permission, but also federal and state agency approval, and comments from each tribe to ensure no archeological artifact is located in the proposed development area.

These interests are directed to and handled by the City during development review and permitting processes, even though most agencies have independent permits and enforcement actions that are separate from the City.

Knowing the various interests, the City established certain goals:

1. The City should maximize opportunities for mutual gain through coordination with Pierce County and neighboring jurisdictions.

2. The City should establish an annexation policy to address future growth along the shoreline.

3. Pursue and/or continue cost-sharing programs with the White River School District and/or State of Washington Department of Health and Human Services for recreational uses.

4. Pursue and/or obtain grants for shoreline uses or activities, such as park development or education.

The actions and permits within shorelines include the following:

B. State Environmental Policy Act (SEPA)

The SEPA process interacts with the shoreline management process in several ways. Compliance with SEPA is required for issuance of any permit that is not specifically exempt from SEPA, or is part of a larger development that is not exempt from SEPA.

An environmental checklist (also known as the "SEPA checklist") must identify expected impacts to the environment that the proposed development may cause. These are listed under categories, such as air, water, and soil, with specific questions under each category. The goal in the checklist is to declare expected ecological impacts and all local, state, and/or federal permits or approvals that may be required.

The checklist will be reviewed by the lead agency and a threshold determination will be made on the proposed project. Checklist review may result in the following determinations:

1. The development is exempt from SEPA review, at which time no further SEPA action will be taken. This sometimes occurs when a project initially looks like it is not exempt, but after reviewing the details on the checklist, it can be considered exempt.

2. A Determination of Non-Significance (DNS) is issued when it is likely that no negative environmental impacts will be caused by the development.

3. A Mitigated Determination of Non-Significance (MDNS) is issued when no negative environmental impacts will be caused by the development if certain mitigation measures are used.

4. A Determination of Significance (DS) is issued if it is likely negative impacts will be caused by the development. The result of a DS is an environmental impact statement (EIS).

Conditioning or denying a permit may be done under powers granted by the SEPA rules (WAC 197-11-660).

C. Growth Management Act (GMA)

The Growth Management Act (RCW 36.70A) fundamentally changed the focus of environmental protection in Washington State. It both empowers and requires local governments to incorporate environmental protection into each decision. At the same time, the GMA did not repeal any preexisting environmental legislation. The SMA, for example, remains unchanged and is still in full force and effect. This means that local and state governments must closely coordinate implementation of the two laws.

The SMA is a program that involves both comprehensive planning and implementation functions through use regulations. GMA-required comprehensive plan elements are similar in many cases to SMA-required SMP elements. The goals relating to environmental protection are similar, particularly as related to public access, recreation and open space. Many of the environmental resources addressed in the SMA and its guidelines are also addressed in the GMA as “critical areas” and natural resource lands.

The SMA focuses on shorelines, with jurisdiction limited to certain water areas and adjacent shorelands. The SMA applies to all cities and counties with shorelines of the state within their boundaries.

Shorelines and other water resources must be managed for a variety of industrial, agricultural, commercial, recreational and environmental purposes. SMPs (implementing the SMA) must receive state review and approval before becoming effective and are adopted as a state rule (WAC). Certain shoreline permits require state approval. Appeals of permit decisions issued under the Buckley Shoreline Master Program are now heard by the Central Puget Sound Growth Hearings Board.

The GMA is broader and limited to counties and cities required to plan under the Act (except that critical area protections apply to all). The GMA established sanctions for noncompliance, and appeals can be filed with regional growth planning hearings boards.

GMA comprehensive plans contain a jurisdiction's vision of its future. Local governments need to include the state perspective in this vision. The state perspective is reflected in the GMA's comprehensive planning goals found in RCW 36.70A.020. For local governments with shoreline areas within their jurisdiction, the local vision should also consider and incorporate the policies of the SMA (RCW 90.58.020).

1.7D. Shoreline Permits and review processes.

The state provides four types proposed shoreline development actions that are overseen by the City in addition to the SEPA threshold determination:

1. **Shoreline exemptions, exceptions, and exclusions**. The state provides for different levels of permitting oversight from both the city and Ecology. This ranges from a project not requiring a city shoreline permit to a project not needing to have any review at all.

   a. The shoreline exemption is a written statement from the city that identifies the proposal meets the exemption criteria of the shoreline substantial development permit and meets the minimum requirements of the SMA and the SMP (see WAC 173-27-140). A shoreline exemption may still need a shoreline conditional use permit or shoreline variance permit, SEPA, and federal or state approvals. An exemption may have conditions placed on it to bring the proposal into full compliance with the SMP. Shoreline exemptions are decided administratively by the planning director. It is governed under WAC-173-27-040.

   b. The Shoreline Exception requires consistency with the city's SMP and the Act but no review or approval from the city. The city can only provide comments to the applicant and Ecology. Uses include remedial actions, boat yard facilities, and WSDOT maintenance and safety improvement projects. It is governed under WAC-173-27-044.

   c. The Shoreline Exclusion is rare and requires no city review and is excluded from consistency with the SMA or SMP. Uses include Washington Energy Facility Site Evaluation Council projects and Environmental Excellence Program projects. Exclusions are governed under WAC 173-27-045.

2. **Shoreline Substantial Development Permit (SSDP)**. The SSDP is the basic shoreline permit that is required for projects that meet the definition of development and are not categorically exempt (see WAC 173-27-040). The city is required to review SSDPs for consistency with the criteria in 173-27-140 and 150. SSDPs are decided administratively by the planning director after notices of application are filed.

3. **Shoreline Conditional Use Permit (SCUP)**. SCUPs are for uses that may cause more impact to the shoreline than permitted uses allowed under the SSDP, or are undefined uses and modifications. Uses and development that are prohibited in the SMP cannot be granted a SCUP. SCUPs are first reviewed by the City with a preliminary decision made by the City's Hearing Examiner. The City's initial decision is then transmitted to the Department of Ecology for a final decision. All projects that require a SCUP must meet the criteria listed in WAC 173-27-140 and 160, which includes the cumulative impacts of the proposal, or if the same proposal

was built in similar circumstances in the area what effect would it have on the shoreline.

4. **Shoreline Variance (SVAR)**. The SVAR is a mechanism that allows variations from the SMP's dimensional and bulk regulations, such as setback and lot coverage. Uses cannot be varied; if a use is specified as prohibited, no variance is possible to allow the use. Like the SCUP, the city gives a preliminary decision that is submitted to the Department of Ecology for a final decision. For a project to be granted a SVAR, the applicant must demonstrate the proposal meets the criteria in WAC 173-27-140 and 170 and which includes the possible cumulative impacts if the proposed development was built in similar circumstances.

E. Section 10/404 Permit Programs

The U.S. Army Corps of Engineers regulates construction in navigable waters under the authority granted by the River and Harbors Act of 1899 (Section 10), the Federal Water Pollution Control Act of 1972 (Section 404), the Clean Water Act of 1977, and numerous amendments and related water quality legislation. The Federal Coastal Zone Management Act requires that federal permits (including Sections 10/404) be consistent with the state's federally approved Coastal Zone Management Program (CZMP), which requires those projects be consistent with the local SMP.

F. Section 401 Water Quality Certification

Section 401 of the Federal Ocean Water Act requires applicants for federal permits to obtain a certification from the state (Department of Ecology) for any activity that could result in the discharge of a pollutant in violation of a state water quality standard. The state must certify that the materials to be discharged will comply with applicable effluent limitations, water quality standards, and any other applicable standards. Typically the 401 certification is administered along with the Section 10/404 permit review, but also applies to other federal permits.

G. Hydraulic Project Approval

The state Hydraulic Code (Chapter 77.55 RCW) requires that anyone proposing construction within or over the waters of the state waterward of the OHWM obtain a permit, called a Hydraulic Project Approval (HPA), from the state Department of Fish and Wildlife. An HPA is required for all types of in-water construction, including streambank protection, pile driving, culvert installation, dredging, gravel removal, and construction of docks, piers, and bulkheads. Shoreline project proponents should be aware that fisheries closure periods (periods when no in-water construction may occur because of spawning or outmigration) can apply to their project. Permitting and project scheduling should take these closure periods into account.

H. Endangered Species Act (ESA)

During development of the 1999 SMP document (March, 1999), the National Marine Fisheries Service listed the Chinook salmon and bull trout as endangered species under the federal ESA. Prior to the petition to list, White River spring Chinook were identified as critical by the 1992 Washington State Salmon and Steelhead Stock Inventory Report. Recovery strategies collectively include functional protection of riparian habitat. South Puget Sound coho are also on the candidate list. All these fish species and others are known to use the White River reach. Chinook and other salmon/steelhead stock status and recovery efforts are significant. All activities within the habitat areas identified for listed species under the ESA will be required to comply with regulations and protection measures enacted under state and federal programs.

Currently, several species are of concern: Puget Sound Chinook is listed as federally threatened, Puget Sound coho is listed as a federal species of concern, and the river may contain migratory bull trout, which is listed as federally threatened.

I. Others

In addition to the regulatory programs listed above, the following laws and programs may also have requirements affecting a proposal, depending on the nature and location of the proposal:

1. Forest Practices Act (RCW 76.09)

2. Flood Plain Management Program (RCW 86.16)

3. Model Toxics Control Act (RCW 70.105)

4. Aquatic Lands Act (RCW 79.90)

1.8 Liberal Construction

As provided for in RCW 90.58.900, the Act is exempted from the rule of strict construction; the Act and this SMP shall be liberally construed to give full effect to the purposes, goals, objectives, and policies for which they are enacted.

1.9 Severability

Should any section or provision of this SMP be declared invalid, such decision shall not affect the validity of this SMP as a whole.

1.10 Effective Date

The SMP is hereby adopted on the 14th day of August, 2012. This SMP and all amendments to it shall become effective *14 days after* approval and adoption by the Department of Ecology as governed by RCW 90.58.070(7).

2 DEFINITIONS

Definitions of the Shoreline Management Act, RCW 90.58, and the shoreline definitions in WAC 173-18, 20, 22, 26, and 27are adopted herein by reference, as amended. The following definitions are for general information for this city and superseded by any conflicting aforementioned definitions.

A

ACT. "**Act**" means chapter 90.58 RCW, the Shoreline Management Act of 1971, as amended.

ADMINISTRATOR, OR SHORELINE ADMINISTRATOR. The "**administrator**," or "shoreline administrator," is the city's planning director.

AGRICULTURAL ACTIVITIES.

A. "**Agricultural activities**" means agricultural uses and practices including, but not limited to: Producing, breeding, or increasing agricultural products; rotating and changing agricultural crops; allowing land used for agricultural activities to lie fallow in which it is plowed and tilled but left unseeded; allowing land used for agricultural activities to lie dormant as a result of adverse agricultural market conditions; allowing land used for agricultural activities to lie dormant because the land is enrolled in a local, state, or federal conservation program, or the land is subject to a conservation easement; conducting agricultural operations; maintaining, repairing, and replacing agricultural equipment; maintaining, repairing, and replacing agricultural facilities, provided that the replacement facility is no closer to the shoreline than the original facility; and maintaining agricultural lands under production or cultivation;

B. "**Agricultural products**" includes, but is not limited to, horticultural, viticultural, floricultural, vegetable, fruit, berry, grain, hops, hay, straw, turf, sod, seed, and apiary

products; feed or forage for livestock; Christmas trees; hybrid cottonwood and similar hardwood trees grown as crops and harvested within twenty years of planting; and livestock including both the animals themselves and animal products including, but not limited to, meat, upland finfish, poultry and poultry products, and dairy products;

C. "**Agricultural equipment**" and "**agricultural facilities**" includes, but is not limited to:

1. The following used in agricultural operations: Equipment; machinery; constructed shelters, buildings, and ponds; fences; upland finfish rearing facilities; water diversion, withdrawal, conveyance, and use equipment and facilities including, but not limited to, pumps, pipes, tapes, canals, ditches, and drains;

2. Corridors and facilities for transporting personnel, livestock, and equipment to, from, and within agricultural lands;

3. Farm residences and associated equipment, lands, and facilities; and

4. Roadside stands and on-farm markets for marketing fruit or vegetables; and

D. "**Agricultural land**" means those specific land areas on which agricultural activities are conducted as of the date of adoption of a local master program pursuant to these guidelines as evidenced by aerial photography or other documentation. After the effective date of the master program, land converted to agricultural use is subject to compliance with the requirements of the master program.

AMENDMENT. "**Amendment**" means a revision, update, addition, deletion, and/or reenactment to an existing shoreline master program.

APPURTENANCE. An "**appurtenance**" is necessarily connected to the use and enjoyment of a single-family residence and is located landward of the ordinary high water mark and the perimeter of a wetland. On a statewide basis, normal appurtenances include a garage; deck; driveway; utilities; fences; installation of a septic tank and drainfield and grading which does not exceed two hundred fifty cubic yards and which does not involve placement of fill in any wetland or waterward of the ordinary high water mark. Local circumstances may dictate additional interpretations of normal appurtenances which shall be set forth and regulated within the applicable master program. Construction authorized under this exemption shall be located landward of the ordinary high water mark.

An "**appurtenance**" does not include non-residential development.

AQUACULTURE. "**Aquaculture**" means the culture or farming of fish, shellfish, or other aquatic plants and animals. Aquaculture does not include the harvest of wild geoduck associated with the state managed wildstock geoduck fishery.

ASSOCIATED WETLANDS. "**Associated wetlands**" means those wetlands which are in proximity to and either influence or are influenced by tidal waters or a lake or stream subject to the Shoreline Management Act.

AVERAGE GRADE LEVEL. "**Average grade level**" means the average of the natural or existing topography of the portion of the lot, parcel, or tract of real property which will be directly under the proposed building or structure. In the case of structures to be built over water, average grade level shall be the elevation of the ordinary high water mark. Calculation of the average grade level shall be made by averaging the ground elevations at the midpoint of all exterior walls of the proposed building or structure.

B

"BARRIER DAM AND FLUME. "**Barrier dam and flume**" means the facilities associated, maintained, and operated by Cascade Water Alliance and/or successors associated with water diversion from the White River into Lake Tapps, including the White River barrier dam, White River headgate and diversion flume, and Rock Chutes Number 1 and Number 2.

BULKHEAD. "**Bulkhead**" means a hard shoreline stabilization structure, often built on a vertical plain at the ordinary high water mark or toe of the slope to prevent upland erosion caused by wave and current energy.

C

CHANNEL MIGRATION ZONE (CMZ). "**Channel migration zone** (**CMZ**)" means the area along a river within which the channel(s) can be reasonably predicted to migrate over time as a result of natural and normally occurring hydrological and related processes when considered with the characteristics of the river and its surroundings.

CLEARING. "**Clearing**" means the destruction or removal of vegetative ground cover and/or trees, including but not limited to, root material removal and/or topsoil removal. This includes such activities as clear cutting or selective harvest of trees, chipping of stumps and hauling off of shrubs, slash piles, etc.

COMMERCIAL. "**Commercial**" means occupied with or engaged in commerce or work intended for commerce.

CONDITIONAL USE. "**Conditional use**" means a use, development, or substantial development which is classified as a conditional use or is not classified within the applicable master program.

CRITICAL AREAS. "**Critical areas**" as defined under chapter 36.70A RCW includes the following areas and ecosystems:

A. Wetlands;

B. Areas with a critical recharging effect on aquifers used for potable waters;

C. Fish and wildlife habitat conservation areas;

D. Frequently flooded areas; and

E. Geologically hazardous areas.

D

DEVELOPMENT. "**Development**" means a use consisting of the construction or exterior alteration of structures; dredging; drilling; dumping; filling; removal of any sand, gravel, or minerals; bulkheading; driving of piling; placing of obstructions; or any project of a permanent or temporary nature which interferes with the normal public use of the surface of the waters overlying lands subject to this chapter at any state of water level. "Development" does not include dismantling or removing structures if there is no other associated development or re-development.

DEVELOPMENT REGULATIONS. "**Development regulations**" means the controls placed on development or land uses by a county or city, including, but not limited to, zoning ordinances, critical areas ordinances, all portions of a shoreline master program other than goals and policies approved or adopted under chapter 90.58 RCW, planned unit development ordinances, subdivision ordinances, and binding site plan ordinances together with any amendments thereto.

DIKES. "**Dikes**" and "**levees**" are manmade earthen embankments used for the purpose of flood control, water impoundment projects or settling basins.

DREDGING. "Dredging" is the removal or displacement of earth or sediments such as gravel, sand, mud or silt and/or other materials or debris from any river and associated shorelines and wetlands. Dredging is normally done for specific purposes such as for installing submarine pipelines or cable crossings, or for dike or drainage system repair and maintenance. Dredging may also be used to mine for aggregates such as sand and gravel. Removing sediments from the de-watered flume is not dredging under this SMP.

E

ECOLOGICAL FUNCTIONS. "**Ecological functions**" or "shoreline functions" means the work performed or role played by the physical, chemical, and biological processes that contribute to the maintenance of the aquatic and terrestrial **environments** that constitute the shoreline's natural ecosystem.

ECOLOGICAL RESTORATION. See "**RESTORE.**"

ECOSYSTEM-WIDE PROCESSES. "**Ecosystem-wide processes**" means the suite of naturally occurring physical and geologic processes of erosion, transport, and deposition; and specific chemical processes that shape landforms within a specific shoreline ecosystem and determine both the types of habitat and the associated ecological functions.

EXEMPT. "**Exempt**" developments are those set forth in WAC 173-27-040 and RCW 90.58.030 (3)(e), 90.58.140(9), 90.58.147,90.58.355, and 90.58.515 which are not required to obtain a substantial development permit but which must otherwise comply with applicable provisions of the act and the local master program.

EXEMPTION. "**Exemption**" means authorization from local government which establishes that an activity is exempt from substantial development permit requirements under WAC 173-27-040, but subject to regulations of the act and the local master program.

F

FAIR MARKET VALUE. "**Fair market value**" of a development is the open market bid price for conducting the work, using the equipment and facilities, and purchase of the goods, services and materials necessary to accomplish the development. This would normally equate to the cost of hiring a contractor to undertake the development from start to finish, including the cost of labor, materials, equipment and facility usage, transportation and contractor overhead and profit. The fair market value of the development shall include the fair market value of any donated, contributed or found labor, equipment or materials.

FEASIBLE. "**Feasible**" means, for the purpose of this SMP, that an action, such as a development project, mitigation, or preservation requirement, meets all of the following conditions:

A. The action can be accomplished with technologies and methods that have been used in the past in similar circumstances, or studies or tests have demonstrated in similar circumstances that such approaches are currently available and likely to achieve the intended results;

B. The action provides a reasonable likelihood of achieving its intended purpose; and

C. The action does not physically preclude achieving the project's primary intended legal use.

In cases where these guidelines require certain actions unless they are infeasible, the burden of proving infeasibility is on the applicant.

In determining an action's infeasibility, the reviewing agency may weigh the action's relative public costs and public benefits, considered in the short- and long-term time frames.

FILL. "**Fill**" means the addition of soil, sand, rock, gravel, sediment, earth retaining structure, or other material to an area waterward of the OHWM, in wetlands, or on shorelands in a manner that raises the elevation or creates dry land.

FLOOD HAZARD MANAGEMENT PROJECTS. "**Flood hazard management projects**" are those actions taken with the primary purpose of preventing or mitigating damage because of flooding. Flood hazard management projects or programs may employ any or several physical or regulatory controls, including dikes, dams, lakes, engineered floodways, bioengineering, planning and zoning (land use management). These provisions also apply to repair and maintenance of flood hazard management systems if the systems are enlarged or otherwise modified.

FLOODPLAIN. "**Floodplain**" is synonymous with one hundred-year floodplain and means that land area susceptible to inundation with a one percent chance of being equaled or exceeded in any given year. The limit of this area shall be based on flood ordinance regulation maps or a reasonable method that meets the objectives of the Shoreline Management Act.

FLOODWAY. "**Floodway**" means the area, as identified in a master program that has been established in federal emergency management agency flood insurance rate maps. The floodway shall not include those lands that can reasonably be expected to be protected from flood waters by flood control devices maintained by or maintained under license from the federal government, the state, or a political subdivision of the state.

FOREST PRACTICES. "Forest practices," as defined by WAC 222-16-010, means any activity conducted on or directly pertaining to forest land and relating to growing, harvesting, or processing timber, or removing forest biomass, including but not limited to:

- Activities in and over typed water;
- Road and trail construction;
- Harvesting, final and intermediate;
- Precommercial thinning;
- Reforestation;
- Fertilization;
- Prevention and suppression of diseases and insects;
- Salvage of trees; and
- Brush control.

"Forest practice" shall not include: Forest species seed orchard operations and intensive forest nursery operations; or preparatory work such as tree marking, surveying and road flagging; or removal or harvest of incidental vegetation from forest lands such as berries, ferns, greenery, mistletoe, herbs, mushrooms, and other products which cannot normally be expected to result in damage to forest soils, timber or public resources.

G

GEOTECHNICAL ANALYSIS. See "**GEOTECHNICAL REPORT.**"

GEOTECHNICAL REPORT. "**Geotechnical report**" or "**geotechnical analysis**" means a scientific study or evaluation conducted by a qualified professional that includes a description of the ground and surface hydrology and geology, the affected land form and its susceptibility to mass wasting, erosion, and other geologic hazards or processes, conclusions and recommendations regarding the effect of the proposed development on geologic conditions, the adequacy of the site to be developed, the impacts of the proposed development, alternative approaches to the proposed development, and measures to mitigate potential site-specific and cumulative geological and hydrological impacts of the proposed development, including the potential adverse impacts to adjacent and down-current properties. Geotechnical reports shall conform to accepted technical standards and

must be prepared by qualified professional engineers or geologists who have professional expertise about the regional and local shoreline geology and processes.

GRADING. "**Grading**" means the movement or redistribution of the soil, sand, rock, gravel, sediment, or other material on a site in a manner that alters the natural contour of the land.

GUIDELINES "**Guidelines**" means those standards adopted to implement the policy of this chapter for regulation of use of the shorelines of the state prior to adoption of master programs. Such standards shall also provide criteria to local governments and the department in developing master programs.

H

HEIGHT. "Height" means a measurement from average grade level to the highest point of a structure: Provided, That television antennas, chimneys, and similar appurtenances shall not be used in calculating height, except where such appurtenances obstruct that view of the shoreline of a substantial number of residences on areas adjoining such shorelines, or the applicable master program specifically requires that such appurtenances be included: Provided further That temporary construction equipment is excluded in this calculation.

L

LEVEES. See "**DIKES.**"

LOW IMPACT. "**Low-impact**" refers to development systems that strive to mimic the natural environment so water can be taken up by trees or vegetation, or soak into the

ground.

M

MASTER PROGRAM. "**Master program**" or Shoreline Master Program shall mean the comprehensive use plan for a described area, and the use regulations together with maps, diagrams, charts, or other descriptive material and text, a statement of desired goals, and standards developed in accordance with the policies enunciated in RCW 90.58.020 and the applicable guidelines.

MINING. "Mining" means the removal and primary processing of naturally occurring materials from the earth for economic use. For purposes of this definition, "**processing**" includes screening, crushing, and stockpiling, all of which utilize materials removed from the site where the processing activity is located.

MITIGATION SEQUENCING. "**Mitigation sequencing**" means a sequence of mitigation measures as defined in WAC 173-26-201(2)(e) that includes the following in order of priority, with (A) of this definition being top priority:

A. Avoid the impact altogether by not taking a certain action or parts of an action;

B. Minimize impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts;

C. Rectify the impact by repairing, rehabilitating, or restoring the affected environment;

D. Reduce or eliminate the impact over time by preservation and maintenance operations;

E. Compensate for the impact by replacing, enhancing, or providing substitute resources or environments; and

F. Monitor the impact and required compensation and take appropriate corrective measures.

N

NATURAL OR EXISTING TOPOGRAPHY. "**Natural or existing topography**" means the topography of the lot, parcel, or tract of real property immediately prior to any site preparation or grading, including excavation or filling.

NONCONFORMITIES. "Nonconformities" include uses, structures, and development that were legally established in a conforming manner, but because of new regulations become nonconforming. **Specifically**, they include the following:

1. "Nonconforming development" means either a nonconforming use or nonconforming structure.

2. "Nonconforming use" means an existing shoreline use that was lawfully established prior to the effective date of the act or the applicable master program, but which does not conform to present use regulations due to subsequent changes to the master program.

3. "Nonconforming structure" means an existing structure that was lawfully constructed at the time it was built but is no longer fully consistent with present regulations such as setbacks, buffers or yards; area; bulk; height or density standards due to subsequent changes to the master program.

4. "Nonconforming lot" means a lot that met dimensional requirements of the applicable master program at the time of its establishment but now contains less than the required width, depth or area due to subsequent changes to the master program.

O

ORDINARY HIGH WATER MARK (OHWM). "**Ordinary high water mark**" on all lakes, streams, and tidal water is that mark that will be found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation as that condition exists on June 1, 1971, as it may naturally change thereafter, or as it may change thereafter in accordance with permits issued by a local government or the department: PROVIDED, that in any area where the ordinary high water mark cannot be found, the ordinary high water mark adjoining salt water shall be the line of mean higher high tide and the ordinary high water mark adjoining fresh water shall be the line of mean high water.

NONWATER-ORIENTED USES. "Nonwater-oriented uses" means those uses that are not water-dependent, water-related, or water-enjoyment.

P

PARKING. "Parking" means the temporary storage of automobiles or other motorized vehicles.

PERMIT. "**Permit**" means any substantial development, variance, conditional use permit, or revision authorized under chapter 90.58 RCW.

PUBLIC INTEREST. "**Public interest**" means the interest shared by the citizens of the state or community at large in the affairs of government, or some interest by which their rights or liabilities are affected including, but not limited to, an effect on public property or on health, safety, or general welfare resulting from a use or development.

Q

QUALIFIED PROFESSIONAL. "**Qualified professional**" means a person with expertise and training appropriate for the relevant subject. A qualified professional must have obtained a B.S. or B.A. or equivalent degree in biology, soil science, engineering, environmental studies, fisheries, geology, hydrology, geomorphology or related field, and at least five years of related work experience. Specific qualified professionals must also meet the following criteria, or any other criteria included in Appendix B, Critical Areas Regulations:

A. A qualified professional providing a geotechnical analysis as required under this Master Program must be a licensed engineer in the State of Washington, with specific training in geology, hydrology and/or geomorphology.

B. A qualified professional providing a demonstration of need as required under this Master Program must have a M.S. or equivalent degree in geology, hydrology, or geomorphology.

C. A qualified professional for wetlands means a biologist who has a degree in biology, ecology, botany, or a closely related field, or has been certified as a Professional Wetland Scientist, and a minimum of five years of professional experience in wetland identification and assessment in Western Washington.

D. A qualified professional for habitat conservation areas means a biologist who has a degree in wildlife biology, ecology, fisheries, or closely related field, and a minimum of five years professional experience related to the subject species/habitat type.

E. A qualified professional for geologically hazardous areas must be an engineer or engineering geologist licensed in the state of Washington. An engineer must be licensed as a civil engineer pursuant to Chapter 18.43 RCW to qualify. An engineering geologist must be a practicing geologist licensed as a professional geologist pursuant to Chapter 18.22, RCW.

F. A qualified professional for critical aquifer recharge areas means a Washington State licensed hydro-geologist, geologist, or engineer.

G. A qualified professional for vegetation management must be a registered landscape architect, certified arborist, biologist, or professional forester with a corresponding degree or certification.

R

RESTORATION. See "**RESTORE.**"

RESTORE. "**Restore**," "**restoration**" or "**ecological restoration**" means the reestablishment or upgrading of impaired ecological shoreline processes or functions. This may be accomplished through measures including but not limited to revegetation, removal of intrusive shoreline structures and removal or treatment of toxic materials. Restoration does not imply a requirement for returning the shoreline area to aboriginal or pre-European settlement conditions.

S

SCIENTIFIC, HISTORICAL, CULTURAL, OR EDUCATIONAL RESEARCH USES. "**Scientific, historical, cultural, or educational research uses**" are those uses that provide data about the shoreline, such as bird watching, school tours along the trails, and counting flora and fauna within the shoreline area.

SHORELAND AREAS. See "**SHORELANDS.**"

SHORELANDS. "**Shorelands**" or "**shoreland areas**" means those lands extending landward for two hundred feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward two hundred feet from such floodways; and all wetlands and river deltas associated with the streams, lakes, and tidal waters which are subject to the provisions of this chapter; the same to be designated as to location by the Department of Ecology.

SHORELINE AREAS. "**Shoreline areas**" and "**shoreline jurisdiction**" means all "**shorelines of the state**" and "**shorelands**" as defined in RCW 90.58.030.

SHORELINE FUNCTIONS. See "**ECOLOGICAL FUNCTIONS."**

SHORELINE JURISDICTION. See "**SHORELINE AREAS.**"

SHORELINE MODIFICATIONS. "**Shoreline modifications**" means those actions that modify the physical configuration or qualities of the shoreline area, usually through the construction of a physical element such as a dike, breakwater, pier, weir, dredged basin, fill, bulkhead, or other shoreline structure. They can include other actions, such as clearing, grading, or application of chemicals.

SHORELINE OF STATEWIDE SIGNIFICANCE "Shorelines **of statewide significance**" is as defined in RCW 90.58.030. The White River is the only shoreline of statewide significance located in the City of Buckley (see RCW 90.58.030(F)).

SHORELINES. "**Shorelines**" means all of the water areas of the state, including reservoirs, and their associated shorelands, together with the lands underlying them; except:

A. Shorelines of statewide significance;

B. Shorelines on segments of streams upstream of a point where the mean annual flow is twenty cubic feet per second or less and the wetlands associated with such upstream segments; and

C. Shorelines on lakes less than twenty acres in size and wetlands associated with such small lakes.

SHORELINES OF THE STATE "**Shorelines of the state**" are the total of all "shorelines" and "shorelines of statewide significance" within the state.

SHOULD. "**Should**" means that the particular action is required unless there is a demonstrated, compelling reason, based on policy of the Shoreline Management Act and this chapter, against taking the action.

SIGNIFICANT VEGETATION REMOVAL. "**Significant vegetation removal**" means the removal or alteration of trees, shrubs, and/or ground cover by clearing, grading, cutting, burning, chemical means, or other activity that causes significant ecological impacts to functions provided by such vegetation. The removal of invasive or noxious weeds does not constitute significant vegetation removal. Tree pruning, not including tree topping, where it does not affect ecological functions, does not constitute significant vegetation removal.

STATE MASTER PROGRAM. "**State master program**" means the cumulative total of all shoreline master programs and amendments thereto approved or adopted by rule by the department.

STRUCTURE. "**Structure**" means a permanent or temporary edifice or building, or any piece of work artificially built or composed of parts joined together in some definite manner, whether installed on, above, or below the surface of the ground or water, except for vessels

SUBSTANTIAL DEVELOPMENT. "**Substantial development**" shall mean any development of which the total cost or fair market value exceeds the amount set by RCW 90.58.030(3)(e), or any development which materially interferes with the normal public use of the water or shorelines of the state. The list of exemptions associated with this definition are moved to SMP 7.2.2.

SUBSTANTIALLY DEGRADE. "**Substantially degrade**" means to cause significant ecological impact.

T

TELECOMMUNICATION FACILITIES. "**Telecommunication Facilities**," "Personal wireless service," and "personal wireless service facilities" as used in this SMP, shall be defined in the same manner as in Title 47, USC, Section 332(c)(7)(C), as they may be amended now or in the future, and includes facilities for the transmission and reception of radio or microwave signals used for communication, cellular phone, personal communications services, enhanced specialized mobile radio, and any other wireless services licensed by the FCC as well as unlicensed wireless services; **except that** these facilities do not include wires over or under existing roads and/or bridges.

TRANSPORTATION FACILITIES. "**Transportation facilities**" are those structures and developments that aid in land and water surface movement of people, goods and services. They include roads and highways, bridges and causeways, bikeways, trails, railroad facilities, ferry terminals, float plane terminals, heliports and other related facilities.

U

UPLAND. "**Uplands**" are generally described as the dry land area (excludes wetlands) above and landward of the OHWM.

UTILITIES. "**Utilities**" are services and facilities that produce, transmit, carry, store, process or dispose of electric power, gas, water, sewage, communications, oil and similar products.

UTILITIES, ACCESSORY. "Accessory Utilities" are on-site utility features serving a primary use, such as a power or water line. Accessory utilities do not carry significant capacity to serve other users and are considered a part of the primary use.

V

VARIANCE. "**Variance**" means a process through which relief may be granted from the specific bulk, dimensional or performance standards set forth in the applicable master program and not a means to vary a use of a shoreline.

VESSEL. "**Vessel**" includes ships, boats, barges, or any other floating craft which are designed and used for navigation and do not interfere with the normal public use of the water.

W

WATER-DEPENDENT USE. "**Water-dependent use**" means a use or portion of a use that cannot exist in a location that is not adjacent to the water and which is dependent on the water by reason of the intrinsic nature of its operations.

WATER-ENJOYMENT USE. "**Water-enjoyment use**" means a recreational use or other use that facilitates public access to the shoreline as a primary characteristic of the use; or a use that provides for recreational use or aesthetic enjoyment of the shoreline for a substantial number of people as a general characteristic of the use and through its location, design, and operation ensures the public's ability to enjoy the physical and aesthetic qualities of the shoreline. To qualify as a water-enjoyment use, the use must be open to the general public and the shoreline-oriented space within the project must be devoted to the specific aspects of the use that fosters shoreline enjoyment.

WATER-ORIENTED USE. "**Water-oriented use**" means a use that is water-dependent, water-related, or water-enjoyment, or a combination of such uses.

WATER QUALITY. "**Water quality**" means the physical characteristics of water within shoreline jurisdiction, including water quantity, hydrological, physical, chemical, aesthetic, recreation-related, and biological characteristics. Where used in this chapter, the term "water quantity" refers only to development and uses regulated under this chapter and affecting water quantity, such as impermeable surfaces and storm water handling practices. Water quantity, for purposes of this SMP, does not mean the withdrawal of groundwater or diversion of surface water pursuant to RCW 90.03.250 through 90.03.340.

WATER-RELATED USE. "**Water-related use**" means a use or portion of a use that is not intrinsically dependent on a waterfront location but whose economic viability is dependent upon a waterfront location because:

A. The use has a functional requirement for a waterfront location such as the arrival or shipment of materials by water or the need for large quantities of water; or

B. The use provides a necessary service supportive of the water-dependent uses, and the proximity of the use to its customers makes its services less expensive and/or more convenient.

WETLANDS. "**Wetlands**" means areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands.

3 SMP GOALS

Per WAC 173-26-186(3), all relevant policy goals must be addressed in the planning policies of a shoreline master program (SMP). This section contains shoreline goals and objectives.

> **Goals** express the ultimate aims of the City and its citizens.
>
> **Objectives** identify more specific steps that move toward achieving a long-term goal.

Goals and objectives provide a framework on which the more detailed SMP shoreline use **environments**, policies, regulations, and administrative procedures are based in subsequent chapters.

3.1 Shoreline Use

A. Identify and reserve shoreline and water areas with unique attributes for specific long-term uses.

B. Encourage appropriate water-oriented uses that are compatible with natural site conditions.

C. Encourage shoreline uses that enhance specific areas or use innovative features for purposes consistent with this program and/or use joint-use activities in proposed shoreline developments.

D. Ensure that proposed shoreline uses:

1. Are distributed, located, and developed in a manner that will maintain or improve the health, safety and welfare of the shoreline environment when such uses must occupy shoreline areas.

2. Respect the rights of others and the rights of private ownership.

3. Are consistent with all planning, zoning and other regulatory and non-regulatory programs governing lands adjacent to shoreline jurisdiction, including the act and this SMP.

4. Cause no net loss of natural systems and/or quality of the shoreline environment.

3.2 Economic Development

A. In evaluating shoreline proposals, acknowledge the critical importance of a balanced and diversified local economy for Buckley.

B. Ensure healthy, orderly economic growth by allowing those economic activities by ensuring any economic activity taking place along the shoreline, including new

economic development, operates without harming the quality of the site's environment or adjacent shorelands.

C. Unless shown to be infeasible, limit new shoreline commercial development to that which is classified as water-dependent, water-related, or water-enjoyment uses and discourage and/or prohibit non-water-oriented uses which are not accessory to a water-oriented use.

D. The City should consider providing some areas of the shoreline for economically productive uses that are particularly dependent on a shoreline location and will cause no permanent damage.

3.3 Circulation

A. Locate land circulation systems that are not shoreline dependent as far from the shoreline as feasible to have the least possible adverse effect on unique or fragile shoreline features and existing ecological systems. Where possible, avoid creating barriers between adjacent uplands and the shoreline.

B. Protect, manage and enhance those characteristics of shoreline roadway corridors that are unique or have historic significance or aesthetic quality, for the benefit and enjoyment of the public.

C. Development that provides public access to the shoreline shall demonstrate it is safe, consistent with the quality of life or property for City residents, and protects fish habitat.

3.4 Conservation

A. Develop and implement management practices that will insure a sustained yield of renewable resources of the shorelines.

B. Protect, enhance, and restore unique and nonrenewable shoreline resources or features, including but not limited to forested areas, wetlands and wildlife habitat.

C. Establish and implement policies and regulations for shoreline use consistent with the Shoreline Management Act of 1971, as amended. These policies and regulations should insure that the overall land use patterns that take place in shoreline areas are compatible with existing shoreline environment designations and are sensitive to, not degrade habitat and ecological systems and other shoreline resources, and provide no net loss of shoreline functions and values.

D. Encourage restoration of shoreline areas that are biologically and aesthetically degraded or diminished in ecological value and function as a result of past activities or catastrophic events.

E. Consider mitigating against undue hardship to property owners caused by restoration projects that shift shorelines by granting relief as authorized by WAC 173-27-215.

3.5 Public Access

A. Implement guidelines that incorporate public access with new shoreline development, as consistent with takings law, except where there is potential hazard to public safety or health.

B. Public access should unify individual access elements into an organized system.

C. Shoreline uses that curtail or reduce existing free movement of the public should be disallowed, unless the restriction is in the interest of the environment, public health and safety, or is necessary to a proposed beneficial use.

3.6 Recreation

A. Provide for appropriate recreational opportunities in shoreline areas that can reasonably tolerate public use of the shoreline without undue risk to safety and existing shoreline facilities.

B. Integrate interagency cooperation into shoreline project review:

1. Coordinate efforts with Pierce and King Counties to gain opportunities for water-oriented recreation.

2, Encourage federal, state and local government to acquire additional shoreline properties for public recreational uses.

3.7 Historic/Cultural

A. Protect and/or restore shoreline or water areas that have archaeological, historic, cultural, educational or scientific value through purchase, easement, gift or other means so as to insure their protection and preservation.

B. Encourage and support educational projects and programs that foster a greater appreciation of the importance of shoreline management, riverine activities and environmental conservation.

3.8 Public Participation

A. Public participation in the adoption and revision of the Shoreline Master Program shall be encouraged through any and all reasonable efforts to inform, fully involve and encourage the participation of all interested parties.

4. SHORELINE JURISDICTION AND ENVIRONMENT DESIGNATIONS

4.1 Shoreline Jurisdiction

As defined by the Shoreline Management Act (SMA) of 1971, "shorelines of the state" include certain waters plus their associated "shorelands."

In Buckley, the White River and its associated wetlands are not only considered shorelines of the state, but also "shorelines of statewide significance," because the White River is a river "west of the crest of the Cascade range downstream of a point where the mean annual flow is measured at one thousand cubic feet per second or more." As such, the White River and its associated wetlands must use the supplemental provisions outlined in Section 4.4, Shorelines of Statewide Significance.

Local jurisdictions may voluntarily elect to expand shoreline jurisdiction to include part or all of the remaining floodplain area that is located beyond 200 feet from either the ordinary high water mark (OHWM) or the floodway, or to include the buffers of associated wetlands that would otherwise be located outside of shoreline jurisdiction. The City chooses to limit shoreline jurisdiction to the minimum required and to not include the optional floodplain area or critical area buffers located outside the minimum jurisdictional area.

Shoreline jurisdiction for the City is shown on the map of environment designations included in Appendix A (Environment Designations Map). Shoreline jurisdiction includes all areas with an environment designation. Note that the map only approximately depicts shoreline jurisdiction. The actual shoreline jurisdiction shall be determined on a case-by-case basis based on the location of the OHWM, floodplain, and/or presence of associated wetlands.

4.2 Environment Designations

This SMP includes a system to classify shoreline areas into specific environment designations. This classification system is based on the existing uses in the shoreline, the biological and physical character of the shoreline, and the goals and aspirations of the City for its shoreline as expressed through its comprehensive plan.

In Section 173-26-211 WAC, the state provides criteria for use in classifying environment designations. Local jurisdictions can use alternate environment designations provided any alternative designations proposed provide equal or better implementation of the SMA.

The City historically used only two shoreline **environments**: conservancy and rural. To be consistent with the State Master Program Approval/Amendment Procedures and Master Program Guidelines (Guidelines), the City revised its environment designation system. The City's environment designations now include the following:

A Special Use;

B. Urban Conservancy;

C Natural; and

D. Aquatic.

Three of these environment designations are from the Department of Ecology's recommended classification system and one is to recognize the barrier dam and flume established by Puget Power. Each environment designation contains a purpose statement, designation criteria, and management policies.

Table 4-1 provides a summary of the environment designations established by this SMP. The map in Appendix A shows the environment designations for all areas of shoreline jurisdiction within the City.

Table 4-1. Summary of Environment Designations in the City of Buckley

Environment Designation	Summary Description
Special Use	A special environment designation is created for the barrier dam and the portion of flume located within shoreline jurisdiction.
Urban Conservancy	Areas designated **urban conservancy** are either currently developed or are planned to accommodate future development, in support of some measure of human interaction, such as recreation.
Natural	Areas designated **natural** are currently undeveloped and largely unaltered by human interaction. These areas provide the most ecological functions (such as wildlife habitat) for the shoreline.
Aquatic	The **aquatic environment** includes the White River, waterward of the OHWM (see definition in Chapter 2, Definitions).

4.2.1. Special use environment.

A. Purpose

The purpose of the **special use environment** is to permit established uses and to allow maintenance activities. These uses include the barrier dam on the east side of the City that diverts a portion of the White River into a flume and to Lake Tapps. It also includes trap and haul activities for fish and a fish ladder. Maintenance activities include periodic sediment removal from the flume and stockpiling the sediment outside of shoreline jurisdiction.

B. Designation Criteria

Local jurisdictions may establish a different environment designation system if it is consistent with the purposes and policies of WAC 173-26-211(4) and (5). A special use designation is assigned to shoreline areas used for the operation and maintenance of the barrier dam and flume, which are existing uses unique to the City, and not classified in the state's designation system. Note that only the portion of barrier dam and flume directly associated with the headworks of the barrier dam lies within the shoreline jurisdiction as described in Section 4.1, Shoreline Jurisdiction.

C. Management Policies

1. The barrier dam is a unique use. It was constructed and used by the prior land owner to create power for Washington residents. It is now used to divert and store potable water for residents in a consortium of Washington cities. The barrier dam and related activities may be an appropriate use within the **special use environment** when conducted in a manner consistent with the environment policies and the provisions of WAC 173-26-241.

2. Pre-existing uses and structures that are necessary for the operation of the barrier dam and flume should be allowed.

3. New development necessary for the efficient operation and maintenance of the barrier dam and flume should be allowed.

4. Maintenance activities associated with the barrier dam and flume should be allowed.

5. Standards should be established for shoreline stabilization measures, vegetation conservation, water quality, and shoreline modifications within the **special use environment**. These standards shall ensure that development or maintenance activity does not result in a net loss of shoreline ecological functions or further degrade other shoreline values.

6. Public access and public recreation objectives should be implemented whenever feasible, legal, and significant ecological impacts can be mitigated.

7. Public uses should be given priority over private uses. Priority should be given to water-dependent over water-oriented uses; water-oriented uses have priority over non-water oriented uses.

D. Regulations**.**

Development within the **special use environment** will adhere to the following regulations:

1. Uses that are listed in Table 6-1 of Chapter 6 of this SMP shall be construed as permitted, conditionally permitted, or prohibited.

2. Bulk regulations include the following:

a. Building or structure height:	35 feet above the averaged existing grade
b. Setbacks for non-water-dependent uses:	150 feet
c. Setbacks for water-dependent uses:	0 feet
d. Setbacks for water-enjoyment uses:	0 feet
e. Setbacks for water-oriented uses:	25 feet
f. Setbacks for all other uses:	150 feet

3. Site development standards in the **special use environment** include the following:

   a. Any required native growth protection areas shall be shown on plans and marked in the field before construction begins.

   b. Any and all time limits given by state or federal agencies concerning animal and habitat shall be adhered to.

   c. Accessory uses for water dependent and water enjoyment uses shall be located landward of the primary use and not closer than 25 feet to the OHWM.

4. The **special use environment** boundary for Lot Number 0619021006 is roughly half-way through the lot at a line drawn roughly parallel to the eastern lot boundary at a point beginning at the bend in the southern lot line (approximately 442.678 feet west from the eastern lot line).

4.2.2 Urban Conservancy

A. Purpose

The purpose of the **urban conservancy environment** is to protect and restore ecological functions of open space, floodplain, and other sensitive lands where they exist in urban and developed settings, while allowing a variety of compatible uses.

B. Designation Criteria

An **urban conservancy environment** designation will be assigned to shoreline areas appropriate and planned for development that is compatible with maintaining or restoring of the ecological functions of the area, that are not generally suitable for water-dependent uses if any of the following characteristics apply:

1. They are suitable for water-related or water-enjoyment uses;

2. They are currently used, or are planned for use, for utilities. Such uses include water resource management for city, region, and for conveyance; sewer outfall and conveyance; electricity conveyance; and storm water outfall and conveyance;

3. They are open space, floodplain, or other sensitive areas that should not be more intensively developed;

4. They contain potential for ecological restoration;

5. They retain important ecological functions, even though partially developed; or

6. They contain the potential for development that is compatible with ecological restoration.

C. Management Policies

Development within the **urban conservancy environment** shall be consistent with the following policies:

1. Uses that preserve the natural character of the area or promote preservation of open space, floodplain, or sensitive lands either directly or over the long term should be the primary allowed uses. Uses that result in restoration of ecological functions should be allowed if the use is otherwise compatible with the purpose of the environment and the setting.

2. Standards should be established for shoreline stabilization measures, vegetation conservation, water quality, and shoreline modifications within the urban conservancy designation. These standards shall ensure that new development does not result in a net loss of shoreline ecological functions or further degrade other shoreline values.

3. Public access and public recreation objectives should be implemented whenever feasible, legal, and significant ecological impacts can be mitigated.

4. Water-oriented uses should be given priority over nonwater-oriented uses.

5. Public water supply wells and utility conveyance should be allowed.

6. Rock chutes associated with the barrier dam and flume are in this environment and should be periodically maintained by removing debris and vegetation from the chute.

D. Regulations

Development within the **urban conservancy environment** will adhere to the following regulations:

1. Uses that are listed in Table 6-1 of Chapter 6 of this SMP shall be construed as permitted, conditionally permitted, or prohibited.

2. Bulk regulations include the following:

   a. Building or structure height: 35 feet above the averaged existing grade

   b. Setbacks for non-water-dependent uses: 150 feet

   c. Setbacks for water-dependent uses: 0 feet

   d. Setbacks for water-enjoyment uses: 25 feet

   e. Setbacks for water-oriented uses: 50 feet

   f. Setbacks for all other uses: 150 feet

3. Site development standards shall be as follows:

   a. Any required native growth protection areas shall be shown on plans and marked in the field before construction begins.

   b. Any and all time limits given by state or federal agencies concerning animal and habitat shall be adhered to.

   c. Accessory uses for water dependent and water enjoyment uses shall be located landward of the primary use.

   d. Impervious trails that are not parallel to the river may intrude into the buffers for a destination use, such as a bridge or viewing area.

   e. Construction materials for trails may include the following:

i. Permeable trails (dirt) are preferred. Some trails must also be accessible to wheeled chairs and bicycles and will need to be solid (not dirt).

ii. Pervious concrete, grasscrete, or other permeable material is preferred.

iii. Concrete or asphalt.

f. Passive recreational development, specifically bird blinds, may be placed within the buffer up to 50 feet from the OHWM and more than 100 feet from a formal trail.

4. Periodic maintenance of existing rock chutes and established flume drainage channels is permitted.

4.2.3 Natural

A. Purpose

The purpose of the **natural environment** is to protect those shoreline areas that are relatively free of human influence or that include intact or minimally degraded shoreline functions intolerant of human use. These systems require that only very low-intensity uses be allowed to maintain the ecological functions and ecosystem-wide processes. Consistent with the policies of the designation, local governments should include planning for restoration of degraded shorelines within this environment.

B. Designation Criteria

A **natural environment** designation will be assigned to shoreline areas if any of the following characteristics apply:

1. The shoreline is ecologically intact and currently performs an important, irreplaceable function or ecosystem-wide process that would be damaged by human activity;

2. The shoreline is considered to represent ecosystems and geologic types that are of particular scientific and educational interest; or

3. The shoreline is unable to support new development or uses without significant adverse impacts to ecological functions or risk to human safety.

Such shoreline areas include largely undisturbed portions of shoreline areas such as wetlands, unstable bluffs, and ecologically intact shoreline habitats.

C. Management Policies

Development within the **natural environment** shall be consistent with the following policies:

1. Any use that would substantially degrade the ecological functions or natural character of the shoreline area should be prohibited.

2. The following new uses should not be allowed in the **natural environment**:

    a. Commercial uses;

    b. Industrial uses;

    c. Nonwater-oriented recreation; and

    d. Roads, utility corridors (except public water supply well corridors, as detailed below), and parking areas that can be located outside of **natural environment** designated shorelines.

3. Public water supply wells and associated corridors should be allowed in the **natural environment** west of SR410 provided an alternate location in the **urban conservancy environment** is infeasible.

4. Commercial forestry may be allowed as a conditional use in the **natural environment** provided it meets the conditions of the Forest Practices Act and its implementing rules and is conducted in a manner consistent with the purpose of this environment designation. Also see Section 6.11._5. Scientific, historical, cultural, educational research uses, and low-intensity water-oriented recreational access uses may be allowed provided that no significant ecological impact on the area will result.

6. Agricultural uses of a very low-intensity nature may be consistent with the natural environment when such use is subject to appropriate limitations or conditions to assure that the use does not expand or alter practices in a manner inconsistent with the purpose of the designation.

7. New development or significant vegetation removal that would reduce the capability of vegetation to perform normal ecological functions should not be allowed. The subdivision of property in a configuration that, to achieve its intended purpose, will require significant vegetation removal or shoreline modification that adversely impacts ecological functions should not be allowed. That is, each new parcel must be able to support its intended development without significant ecological impacts to the shoreline ecological functions.

8. Rock chutes associated with the barrier dam and flume are in this environment and should be periodically maintained by removing debris and vegetation from the chute.

D. Regulations**.**

Development within the **natural environment** will adhere to the following regulations:

1. Uses that are listed in Table 6-1 of Chapter 6 of this SMP shall be construed as permitted, conditionally permitted, or prohibited.

2. Bulk regulations include the following:

   a. Building or structure height: 35 feet above the averaged existing grade

   b. Setbacks for non-water-dependent uses: 150 feet

   c. Setbacks for water-dependent uses: 0 feet

   d. Setbacks for water-enjoyment uses: 0 feet

   e. Setbacks for water-oriented uses: 100 feet

   f. Setbacks for all other uses: 150 feet

3. Site development standards in the **natural environment** shall be as follows:

   a. Any required native growth protection areas shall be shown on plans and marked in the field before construction begins.

   b. Any and all time limits given by state or federal agencies concerning animal and habitat shall be adhered to.

   c. Accessory uses for water dependent and water enjoyment uses shall be located landward of the primary use.

   d. Impervious trails that are not parallel to the river may intrude into the buffers for a destination use, such as a bridge or viewing area.

   e. Construction materials for trails may include the following in order of preference:

      i. Permeable trails (dirt). Some trails must also be accessible to wheeled chairs and bicycles and will need to be solid (not dirt).

      ii. Pervious concrete, grasscrete, or other permeable material.

      iii. Concrete or asphalt.

   f. Passive recreational development, specifically bird blinds, may be placed within the buffer up to 50 feet from the OHWM and more than 100 feet from a formal trail

4. Periodic maintenance of existing rock chutes and established flume drainage channels is permitted.

4.2.4 Aquatic

A. Purpose

The purpose of the **aquatic environment** is to protect, restore, and manage the unique characteristics and resources of the areas waterward of the OHWM.

B. Designation Criteria

An **aquatic environment** designation will be assigned to shoreline areas waterward of the OHWM.

C. Management Policies

Development within the **aquatic environment** shall be consistent with the following policies:

1. New over-water structures should be prohibited except for water-dependent uses, public access, transportation facilities of statewide significance, or ecological restoration.

2. The size of new over-water structures should be limited to the minimum necessary to support the structure's intended use.

3. To reduce the impacts of shoreline development and increase effective use of water resources, multiple use of over-water facilities should be encouraged.

4. All developments and uses on navigable waters or their beds should be located and designed to minimize interference with surface navigation, to consider impacts to public views, and to allow for the safe, unobstructed passage of fish and wildlife, particularly those species dependent on migration.

5. Uses that adversely impact the ecological functions of critical freshwater habitats should not be allowed. Where those uses are necessary to achieve the objectives of RCW 90.58.020, their impacts shall be mitigated according to the sequence described in regulation 5.7.3(E.)(1.)(a.) of this SMP as necessary to assure no net loss of ecological functions.

6. Shoreline uses and modifications should be designed and managed to prevent degradation of water quality and alteration of natural hydrographic conditions.

D. Regulations**.**

Development within the **aquatic environment** will adhere to the following regulations:

1. Uses that are listed in Table 6-1 of Chapter 6 of this SMP shall be construed as permitted, conditionally permitted, or prohibited.

2. Site development standards in the **aquatic environment** shall be as follows:

    a. New over-water structures' heights and sizes shall be limited to the minimum necessary to support the intended use.

4.2.5 Official Shoreline Map and Unmapped or Undesignated Shorelines

A. The Environment Designations Map in Appendix A is the Official Shoreline Map and illustrates the delineation of environment designations in the City. Shoreline jurisdiction includes all areas with an environment designation

B. Any areas within shoreline jurisdiction that are not mapped and/or designated shall carry the same designation as the adjacent environment.

C. Wetlands shall be assigned the environment designation in which the wetland falls.

D. All other areas of shoreline jurisdiction that were neither mapped as jurisdiction, nor assigned an environment designation shall be assigned an urban conservancy designation until the shoreline can be redesignated through an SMP amendment.

E. In addition, any property shown in shoreline jurisdiction that does not meet the criteria for shoreline jurisdiction (e.g. is no longer in floodplain jurisdiction, does not contain associated wetlands) shall not be subject to the requirements of this SMP. Note that the actual location of the OHWM, floodplain, floodway, and wetland boundaries must be determined at the time a development is proposed. Wetland boundary determinations are valid for five years.

4.2.6 Interpretation of Environment Designation Boundaries

A. Boundaries indicated as approximately following lot lines shall be so construed.

4.3 Shoreline Use Preferences

This SMP adopts by reference the policy provided in RCW 90.58.020, and fully implements it to the extent of its authority under this SMP.

When determining allowable uses and resolving use conflicts on shorelines within jurisdiction consistent with the above-mentioned policy, the preferences and priorities as listed in WAC 173-26-201(2)(d) shall be applied in the order presented.

4.4 Shorelines of Statewide Significance

4.4.1 Designation Criteria

In the City of Buckley, the White River is considered to be a "shoreline of statewide significance," because it is a river "west of the crest of the Cascade range downstream of a

point where the mean annual flow is measured at one thousand cubic feet per second or more."

4.4.2 Use Preferences

In accordance with RCW 90.58.020, the following management and administrative policies are hereby adopted for all shorelines of statewide significance in the City of Buckley, as defined in RCW 90.58.030(2)(e). Consistent with the policy contained in RCW 90.58.020, preference shall be given to the uses in the following order of preference:

A. Recognize and protect the statewide interest over local interest;

B. Preserve the natural character of the shoreline;

C. Result in long term over short term benefit;

D. Protect the resources and ecology of the shoreline;

E. Increase public access to publicly owned areas of the shorelines;

F. Increase recreational opportunities for the public in the shoreline;

G. Provide for any other element as defined in RCW 90.58.100 deemed appropriate or necessary.

Uses that are not consistent with these preferences should not be permitted on shorelines of statewide significance.

4.4.3 Policies

Consistent with the use preferences for shorelines of statewide significance contained in RCW 90.58.020, the City of Buckley will base decisions administering this SMP on the following policies in order of decreasing priority:

A. Recognize and protect the statewide interest over local interest.

1. Circulate amendments to the SMP and any proposed shoreline amendments affecting shorelines of statewide significance to state agencies, affected Tribes, adjacent jurisdictions, citizen's advisory committees, local officials and statewide interest groups including the departments of Ecology and Fish and Wildlife, and the cities of Enumclaw, Bonney Lake, and Wilkeson,

2. Recognize and take into account state agencies' policies, programs and recommendations in developing and administering use regulations and in approving shoreline permits.

3. Solicit comments, opinions, and advice from individuals with expertise in ecology and other scientific fields pertinent to shoreline management.

B. Preserve the natural character of the shoreline.

1. Protect and restore the ecology and environment of the shoreline and ensure that all new development results in no net loss of ecological function.

2. Protect and restore existing diversity of vegetation and habitat values, wetlands, and riparian corridors associated with shoreline areas.

3. Protect and restore habitats for state-listed priority species.

C. Support actions that result in long-term benefits over short-term benefits.

1. Evaluate the short-term economic gain or convenience of developments relative to the long-term and potentially costly impairments to the natural shoreline.

2. Preserve resources and values of shorelines of statewide significance for future generations and restrict or prohibit development that would irretrievably damage shoreline resources.

3. Ensure the long-term protection of ecological resources of statewide importance, such as anadromous fish habitats and unique **environments**.

D. Protect the resources and ecology of the shoreline.

1. All shoreline development should be located, designed, constructed, and managed consistent with mitigation sequencing provisions outlined in regulation 5.7.3.E.1. of this SMP to minimize adverse impacts to regionally important wildlife resources and migratory routes and to result in no net loss of shoreline ecosystems and ecosystem-wide processes.

2. Actively promote aesthetic considerations when contemplating new development, redevelopment of existing facilities, or general enhancement of shoreline areas.

E. Increase public access to publicly owned areas of the shoreline.

1. Give priority to developing paths and trails to shoreline areas and linear access along the shorelines where it would not threaten ecological function, especially those trail corridors that would be a regional recreational and transportation resource.

F. Increase recreational opportunities for the public on the shoreline.

1. Plan for and encourage development of facilities for public recreational use of the shoreline.

5 GENERAL POLICIES AND REGULATIONS

Chapter 5 presents general policies and regulations that apply to all developments, uses, or activities in all areas of shoreline jurisdiction regardless of environmental designation to protect environmental and cultural resources, reduce likelihood of harm to life or property from hazardous conditions, and promote access to shorelines.

Policies are statements of principles that guide and determine present and future decisions.

Regulations are rules that govern developments, uses, or activities.

5.1 Archaeological and Historic Resources

5.1.1 Applicability

The following provisions apply to archaeological and historic resources. These resources are recorded at the Washington State Department of Archaeology and Historic Preservation, available through tribal records, or are inadvertently uncovered. Archaeological sites located both in and outside shoreline jurisdiction are subject to Chapter 27.44 RCW (Indian graves and records) and Chapter 27.53 RCW (Archaeological sites and resources). Development or uses that may impact these sites shall comply with Chapter 25-48 WAC (Archaeological excavation and removal permit) as well as the provisions of this section.

5.1.2 Policies

A. Because archaeological and historic resources are limited and irreplaceable, it is imperative to prevent the destruction of or damage to any site that has historic, cultural, scientific, or educational value as identified by the appropriate authorities, including affected Indian tribes, such as the Puyallup and Muckleshoot tribes, and the Washington State Department of Archaeology and Historic Preservation.

B. Any proposed site development and/or associated site demolition work should be planned and carried out so as to avoid impacts to the cultural resource or to provide appropriate mitigation. Impacts to neighboring properties and other shoreline uses should be limited to temporary or reasonable levels.

C. If development or demolition is proposed adjacent to an identified historic, cultural, or archaeological site, then the proposed development should be designed and operated so as to be compatible with continued protection of the historic, cultural or archaeological site.

5.1.3 Regulations

A. Permits issued in areas documented to contain archaeological resources shall require a site inspection or evaluation by a professional archaeologist in coordination with affected Indian tribes.

B. Significant archaeological and historic resources shall be permanently preserved for scientific study, education and/or public observation. When the City determines that a site has significant archaeological, natural, scientific or historical value, a shoreline permit shall not be issued that would pose a threat to the site. The City may require that development be postponed in such areas to allow investigation of public acquisition potential and/or retrieval and preservation of significant artifacts.

C. Identified historical or archaeological resources shall be considered in park, open space, public access, and site planning, with access to such areas designed and managed to give maximum protection to the resource and surrounding environment.

D. Developers and property owners shall immediately stop work and notify the City, the Washington State Department of Archaeology and Historic Preservation, and affected Indian tribes if archaeological resources are uncovered during excavation.

E. Archaeological excavations may be permitted subject to the provisions of this program and Chapter 27.44 RCW (Indian graves and records), Chapter 27.53 RCW (Archaeological sites and resources), and Chapter 25-48 WAC (Archaeological excavation and removal permit).

5.2 Critical Areas

5.2.1 Applicability

Within shoreline jurisdiction, critical areas and the associated buffers are regulated by the provisions contained in Appendix B of this SMP and this section. In the circumstance where a critical area extends outside of shoreline jurisdiction so that the buffer is not located inside of shoreline jurisdiction, the portion of critical area and buffer located outside of shoreline jurisdiction will be regulated by the city's critical areas ordinance found in the Buckley Municipal Code.

5.2.2 Policies

A. Critical areas within shoreline jurisdiction are regulated under the SMP to be consistent with WAC 173-26-221(2).

B. If there are conflicts between the regulations contained in the SMP, those that are the most protective of shoreline ecological functions will apply.

C. By limiting development and alteration of critical areas, the SMP seeks to:

1. Protect members of the public and public resources and facilities from injury, loss of life, or property damage due to landslides and steep slope failures, erosion, seismic events, volcanic eruptions, or flooding;

2. Protect unique, fragile, and valuable elements of the environment, including ground and surface waters, wetlands, and fish and wildlife and their habitats;

3. Direct activities not dependent on critical area resources to less ecologically sensitive sites and mitigate unavoidable impacts to critical areas by regulating alterations in and adjacent to critical areas;

4. Prevent cumulative adverse environmental impacts to water quality, wetlands, fish and wildlife habitat, frequently flooded areas, and habitat conservation areas; and

5. Implement the primary goal of achieving no net loss of wetland area, wetland functions and values, including lost time when the wetland doesn't perform its function.

D. The regulations of this SMP are intended to protect critical areas in accordance with the Growth Management Act and through the application of best available science, as determined according to WAC 365-195-900 through 365-195-925, and in consultation with state and federal agencies and other qualified professionals.

5.2.3 Regulations

A. The City of Buckley shall regulate all uses, activities, and developments within, adjacent to, or likely to affect one or more critical areas, consistent with best available science and the provisions of the SMP and its appendixes.

B. Critical areas regulated by the SMP include: wetlands, critical aquifer recharge areas, frequently flooded areas, geologically hazardous areas, and fish and wildlife habitat conservation areas.

C. Any action taken pursuant to the SMP shall result in equivalent or greater functions and values of the critical areas associated with the proposed action.

D. All actions and developments shall be designed and constructed in accordance with SMP Section 5.7.3.E.1, and/or SMP Appendix B Section B.1.13, Innovative Mitigation, to minimize and mitigate all adverse impacts.

E. Before affecting any critical area or its buffer, an applicant shall demonstrate that mitigation sequencing was considered in the order given (see definition).

5.3 Flood Hazard Reduction

5.3.1 Applicability

The following provisions apply to actions taken to reduce flood damage or hazard and to uses, development, and shoreline modifications that are proposed in flood hazard areas. Flood hazard reduction measures may consist of nonstructural measures, such as shoreline buffers, land use controls, wetland restoration, dike removal, use relocation, biotechnical measures, and stormwater management programs, and of structural measures, such as dikes, levees, revetments, floodwalls, channel realignment, and elevation of structures consistent with the National Flood Insurance Program.

Although some flood hazard reduction measures may serve a dual function as shoreline stabilization, their primary purpose is to control the location of flood waters directly. Alternatively, the primary purpose of shoreline stabilization measures is to prevent erosion of land from currents and waves originating in the shoreline waterbody (rather than upland sources of erosion), which is a more indirect control of the location of flood and non-flood water.

Also please see SMP Appendix B Chapter B.4.

5.3.2 Policies

A. The City should ensure public and private flood control measures are consistent with applicable engineering principles, watershed plans, channel migration zone plans, restoration plans, critical areas regulations, floodplain regulations, and stormwater management plans and regulations to prevent flood damage, maintain the natural hydraulic capacity of floodways, and conserve limited resources such as fish habitat, water, and soil.

B. New or expanding development or uses in the shoreline, including subdivision of land, that would likely require structural flood control works within a river, channel migration zone, or floodway should not be allowed.

C. Where feasible, non-structural methods to protect, enhance, and restore shoreline ecological functions and processes and other shoreline resources should be encouraged as an alternative to structural flood control works. Non-structural methods may include but are not limited to shoreline buffers, land use controls, wetland restoration, dike removal, use relocation, biotechnical measures, stormwater management programs, land or easement acquisition, voluntary protection and enhancement projects, or incentive programs.

D. Flood control works should be bioengineered to enhance ecological functions, create a more natural appearance, improve ecological processes, and provide more flexibility for long-term shoreline management.

E. New structural flood hazard reduction measures in shoreline jurisdiction should be allowed only when it can be demonstrated (see 5.3.3(D) below) by a scientific and engineering analysis that:

1. They are necessary to protect existing development;

2. Nonstructural measures are not feasible;

3. Impacts on ecological functions and priority species and habitats can be successfully mitigated so as to assure no net loss;

4. Appropriate vegetation conservation actions are undertaken consistent with Section 5.5, Vegetation Conservation; and

5. Structural flood hazard reduction measures should be consistent with the City's comprehensive flood hazard management plan.

F. Flood control works and shoreline uses, developments, and shoreline modifications should be located, designed, constructed and maintained so their resultant effects on geohydraulic shoreline processes will not cause significant damage to other properties or shoreline resources, and so that the physical integrity of the shoreline corridor is maintained.

G. Flood hazard protection measures should result in no net loss of ecological functions and ecosystem-wide processes associated with rivers.

H. Development in floodplains should be consistent with applicable flood hazard plans and regulations and avoid cumulatively increasing flood hazards.

5.3.3 Regulations

A. Floodplain development shall demonstrate no significant or cumulative increases to flood hazards.

B. New development or uses, including the subdivision of land, shall not be established when it can be reasonably foreseeable that the development or use would require structural flood hazard reduction measures within the channel migration zone or floodway during the life of the development or use, consistent with C below.

C. The following uses and development may be authorized where appropriate and/or necessary within the channel migration zone or floodway:

1. Actions that protect or restore the ecosystem-wide processes or ecological functions, including development with a primary purpose of protecting or restoring ecological functions and ecosystem-wide processes.

2. Bridges, utility lines, outfalls, and other public utility and transportation structures where no other feasible alternative exists or the alternative would result in unreasonable and disproportionate costs. Where such structures are allowed, mitigation shall address affected functions and processes in the affected section of the watershed.

3. Repair and maintenance of an existing legally established use, provided that such actions do not cause significant ecological impacts or increase flood hazards to other uses.

4. Modifications or additions to an existing non-agricultural legal use, provided that channel migration is not further limited and that the new development includes appropriate protection of ecological functions.

5. Existing development that prevents active channel movement and flooding.

6. Measures to reduce shoreline erosion, provided that it is demonstrated that the erosion rate exceeds that which would normally occur in a natural condition, that the measure does not interfere with fluvial hydrological and geomorphological processes normally acting in natural conditions, and that the measure includes appropriate mitigation of impacts to ecological functions associated with the river or stream

D. All applications for new structural flood hazard reduction measures in shoreline jurisdiction shall demonstrate the following:

1. That they are necessary to protect existing development and that nonstructural measures are not feasible, as documented in a scientific and engineering analysis;

2. That impacts on ecological functions and priority species and habitats can be successfully mitigated to assure no net loss;

3. That appropriate vegetation conservation actions will be undertaken consistent with Section 5.5, Vegetation Conservation; and

4. That structural flood hazard reduction measures are consistent with the City's comprehensive flood hazard management plan.

E. New structural flood hazard reduction measures shall be placed landward of associated wetlands and designated shoreline buffers, except for actions that increase ecological functions, such as wetland restoration; provided that such flood hazard reduction projects be authorized if it is determined that no other alternative to reduce flood hazard to existing development is feasible. The need for and analysis of feasible alternatives to structural improvements shall be documented through a geotechnical and hydrological analysis.

F. New structural flood hazard reduction measures shall be limited in size to the minimum height required to protect adjacent land from the protected flood stage as identified in the applicable comprehensive flood control management plan.

G. New structural public flood hazard reduction measures, such as dikes and levees, shall dedicate and improve public access pathways unless public access improvements would cause unavoidable health or safety hazards to the public, inherent and unavoidable security problems, unacceptable and unmitigateable significant ecological impacts, unavoidable conflict with the proposed use, constitute an illegal takings or substantive due process violation if required, or a cost that is disproportionate and unreasonable to the total long-term cost of the development.

H. The removal of gravel for flood management purposes shall be consistent with Section 6.9, Dredging and Dredge Material Disposal, and be allowed only after a biological and geomorphological study shows that extraction has a long-term benefit to flood hazard reduction, does not result in a net loss of ecological functions, and is part of a comprehensive flood management solution

I. The City shall require professional design of flood hazard reduction measures where such projects may cause interference with normal geohydraulic processes, lead to erosion of other shoreline properties, or adverse effects to shoreline resources and uses.

J. The City shall require additional information during its review of shoreline flood management projects and programs. Please see SMP 7.2.1.C for specific submittal requirements.

5.4 Public Access

5.4.1 Applicability

Public access includes the ability of the general public to reach, touch, and enjoy the water's edge, to travel on the waters of the state, and to view the water and the shoreline from adjacent locations.

5.4.2 Policies

A. Development, uses, and activities on or near the shoreline should not unreasonably impair or detract from the public's legal access to the water and visual access.

B. Physical or visual access to shorelines should be incorporated in all new developments when the development would either generate a demand for one or more forms of access or would impair existing legal access opportunities or rights.

C. Non-water-oriented uses located on the shoreline should provide public access as a public benefit

D. Shoreline development by public entities such as the City, state agencies, and public utility districts should provide public access unless such access is shown to be incompatible because of reasons of safety, security, or impact to the shoreline.

E. Public access should be designed to minimize potential impacts to private property and individual privacy. Physical separation or other means should clearly delineate public and private space to avoid unnecessary user conflict.

F. Public access should be provided as close as possible to the water's edge without causing significant ecological impacts.

G. Publicly accessible viewing areas are encouraged in appropriate locations in shoreline jurisdiction.

H. Public use and access to the water should be a priority in recreational development.

I. Trails should link shoreline parks, recreation areas, and public access points.

J. Public access facilities should be designed to address public health and safety.

K. Public access facilities should be designed with provisions for persons with disabilities, where appropriate.

5.4.3 Regulations

A. Shoreline uses and activities shall be designed and operated to avoid blocking, reducing, or adversely interfering with the public's visual and physical access to the water

B. Except as provided in subsection 5.4.3.D. below, shoreline substantial developments or conditional uses shall provide public access where any of the following conditions are present:

1. A development or use will create increased demand for public access to the shoreline or will interfere with an existing public access way. Such interference may be caused by blocking access or by discouraging use of existing on-site or nearby accesses.

2. New non-water-oriented uses are proposed.

3. A use or activity will interfere with public use of lands or waters subject to the public trust doctrine.

4. The development or use is by public entities such as the City, state agencies, and public utility districts.

C. The shoreline permit application shall describe the impact, the required public access conditions, and how the proposed conditions address the impact.

D. Public access shall not be required where one or more of the following conditions apply:

1. Unavoidable health or safety hazards to the public exist which cannot be prevented by any feasible means.

2. Constitutional or other legal limitations may apply.

3. Inherent security requirements of the use cannot be satisfied through the application of alternative design features or other solutions be mitigated will result from the public access.

4. Adverse impacts to shoreline ecological processes and functions that cannot be avoided.

5. Significant unavoidable conflict between any access provisions and the proposed use and adjacent uses would occur and cannot be mitigated.

E. To meet any of the conditions in subsection 5.4.3.D. above, the applicant must first demonstrate, and the City determine in its findings, that all reasonable alternatives to provide public access are exhausted, including but not limited to:

1. Regulating access by such means as maintaining a gate and/or limiting hours of use.

2. Separating uses and activities (e.g. fences, terracing, use of one-way glazings, hedges, landscaping).

3. Developing access at a site geographically separated from the proposal such as a street end, vista or trail system.

4. Sharing the cost of providing and maintaining public access between public and private entities.

F. Projects that meet the criteria of subsection 5.4.3.D. above shall build off-site public access facilities to the extent consistent with constitutional takings and substantive due process law.

G. Public access provisions shall run with the land and be recorded in an easement or dedication. Such legal instruments shall be recorded prior to the time of building permit approval, occupancy or plat approval, whichever comes first (RCW 58.17.110). Future actions by the applicant's successors in interest or other parties shall not diminish the usefulness or value of required public access areas and associated improvements.

H. The minimum width of public access easements shall be 20 feet.

I. Required public access sites shall be fully developed and available for public use at the time of occupancy of the use or development.

J. Public access provided by existing shoreline street ends and public rights-of-way shall be preserved, maintained, and enhanced consistent with RCW 35.79.035.

K. Public access shall be marked with a sign.

L. Public access sites shall be connected directly to the nearest public street, park, right of way, etc.

M. Public access sites shall be made barrier-free for the physically disabled, where feasible, and in accordance with the Americans with Disabilities Act.

N. Public restrooms, facilities for disposal of animal waste and other appropriate public facilities shall be required at developments that attract a substantial number of persons.

O. Publicly accessible viewing areas, where allowed, shall not include in-water structures.

P. Public access improvements shall be located, designed, constructed, and maintained in a manner that does not result in a net loss of shoreline ecological functions.

5.5 Vegetation Conservation

5.5.1 Applicability

Vegetation conservation includes activities to protect and restore vegetation along or near shorelines that contribute to the ecological functions of shoreline areas. Vegetation

conservation provisions include the prevention or restriction of plant clearing and earth grading, vegetation restoration, and the control of invasive weeds and nonnative species.

Clearing and grading is the activity associated with developing property for a particular use, including commercial and recreational uses.

Vegetation conservation includes those forestry activities over which the City has authority. As with all SMP provisions, vegetation conservation provisions apply even to those shoreline uses and developments that are exempt from the requirement to obtain a permit. Like other SMP provisions, vegetation conservation standards do not apply retroactively to existing uses and structures, such as existing agricultural practices.

5.5.2 Policies

A. Vegetation conservation should be undertaken to:

1. Protect and restore the ecological functions and ecosystem-wide processes performed by vegetation along shorelines;

2. Protect human safety and property;

3. Increase the stability of river banks;

4. Reduce the need for structural shoreline stabilization measures;

5. Improve the visual and aesthetic qualities of the shoreline;

6. Protect plant and animal species and their habitats; and

7. Enhance shoreline uses.

B. Where new developments and/or uses or redevelopments are proposed, native shoreline vegetation should be conserved to maintain shoreline ecological functions and/or processes. Vegetation conservation and restoration should be used to mitigate the direct, indirect, and/or cumulative impacts of shoreline development, wherever feasible. Important functions of shoreline vegetation include and are not limited to:

1. Provide shade necessary to maintain water temperatures required by salmonids and other organisms that require cool water for all or a portion of their life cycles.

2. Regulate microclimate in riparian and nearshore areas.

3. Provide organic inputs necessary for aquatic life, including providing food in the form of various insects and other benthic macroinvertebrates.

4. Stabilize banks, reduce erosion and sedimentation, and reduce the occurrence/severity of landslides.

5. Reduce fine sediment input into the **aquatic environment** by:

a. minimizing erosion;

b. increasing infiltration; and

c. retaining runoff.

6. Improve water quality through filtration and vegetative uptake of nutrients and pollutants (including the retention of forest duff to support the biological components of pollutant transformation).

7. Provide a source of large woody debris to moderate flows, create hydraulic roughness, form pools, and increase structural diversity for salmonids and other species.

8. Provide habitat elements for riparian-associated species, including downed wood, snags, migratory corridors, food, and cover.

C. Clearing and grading activities should minimize environmental impacts through proper site planning, construction timing, and best management practices, which may include mitigation sequencing.

D. The management and control of noxious and invasive weeds should be authorized through a shoreline exemption. Control of such species should be done in a manner that minimizes impacts to native vegetation, provides for erosion control, and protects water quality. The use of non-toxic or natural controls is preferred.

E. Aquatic weed management should stress prevention first. Where active removal or destruction is necessary, it should be the minimum to allow water-dependent activities to continue, minimize negative impacts to native plant communities, and include appropriate handling or disposal of weed materials.

F. All vegetation conservation activities should be designed with the objective of maintaining natural diversity in vegetation species, age, and cover density.

5.5.3 Regulations

A. Before any clearing and/or grading work is performed, a replanting plan and specific information shall be submitted for approval. Please see SMP 7.2.1.C for submittal requirements.

B. Clearing and grading activities within shoreline jurisdiction shall be limited to the minimum necessary to accommodate approved shoreline development.

C. All cleared areas shall be replanted with native vegetation following development activity and irrigated (if necessary) to ensure that within three years all vegetation is fully reestablished. Areas that fail to adequately reestablish vegetation shall be replanted until such time as the plantings are viable.

D. Restoration of any shoreline that was disturbed or degraded shall revegetate with native plants. The use of commercial nursery stock in the restoration of disturbed or degraded shorelines shall emulate the previously existing vegetation in size, structure, and diversity at maturation.

E. Tree removal may be allowed as follows:

1. Selective, nondestructive pruning of trees for safety is allowed. Where trees pose a significant safety hazard as indicated in a written report by a certified arborist or other qualified professional, they may be removed from shoreline and critical area buffers if the hazard cannot be removed.

2. All other tree removal in shoreline jurisdiction shall be minimized through site design, and mitigated.

3. Trees that are cut down shall be retained in the area where the trees were removed to provide continued biological or soil stabilization functions.

F. Vegetation removal by handheld equipment of invasive nonnative shoreline vegetation or plants listed on the State Noxious Weed List may be authorized through a shoreline exemption in shoreline locations if native vegetation is promptly reestablished in the disturbed area. A replanting plan and erosion control devices, if needed, shall be approved by the City before vegetation is removed.

G. Aquatic weed control shall only occur when native plant communities and associated habitats are threatened or where an existing water dependent use is restricted by the presence of weeds.

H. Vegetation removal conducted without the appropriate review and approvals requires the submittal and approval of a mitigation plan prepared by a qualified professional, and must be consistent with the requirements of the SMP critical areas regulations. The mitigation plan must use only native vegetation, and should be designed to compensate for temporal loss of function and address the specific functions adversely affected by the unauthorized vegetation removal.

I. For each proposal, the applicant shall supply application information to the city for review in addition to the standard submittal requirements. Please see SMP 7.1.2.C. I.

J. When clearing and/or grading is allowed, it shall follow the following regulations:

1. Grading is allowed only during the dry season, which is typically regarded as beginning on May 1st and ending on October 1st of each year, provided, that the City of Buckley may extend or shorten the dry season on a case-by-case basis, determined on actual weather conditions.

2. The soil duff layer shall remain undisturbed to the maximum extent possible. Where feasible, any soil disturbed shall be redistributed to other areas of the project area.

3. The moisture-holding capacity of the topsoil layer shall be maintained by minimizing soil compaction or reestablishing natural soil structure and infiltrative capacity on all areas of the project area not covered by impervious surfaces.

4. Erosion and sediment control that meets or exceeds the regulations as required by the Department of Ecology Stormwater Management Manual for Western Washington (2012), as amended.

5.6 Water Quality, Stormwater and Nonpoint Pollution

5.6.1 Applicability

The following section applies to all development and uses in shoreline jurisdiction that affect water quality (for areas shown to be aquifer recharge areas, please also see Section 12.10.050 of Appendix B).

5.6.2 Policies

A. This SMP shall protect against adverse impacts to the public health, to the land and its vegetation and wildlife, and to the waters of the state and their aquatic life, through implementation of the following principles:

1. Prevent impacts to water quality and stormwater quantity that would result in a net loss of shoreline ecological functions, or a significant impact to aesthetic qualities, or recreational opportunities.

2. Ensure mutual consistency between shoreline management provisions and other regulations that address water quality and stormwater quantity, including public health, stormwater, and water discharge standards. The regulations that are most protective of ecological functions shall apply.

B. Shoreline use and development, including invasive or noxious weed control, should minimize the need for chemical fertilizers, pesticides, or other similar chemical treatments to prevent contamination of surface and ground water and/or soils and adverse effects on shoreline ecological functions and values.

C. The location, design, construction, and management of all shoreline uses and development shall protect the quality and quantity of surface and ground water adjacent to the site. The development shall adhere to the guidelines, policies, standards and regulations of applicable water quality management programs and related regulatory agencies.

5.6.3 Regulations

A. The location, design, construction, and management of all shoreline uses and development shall protect the quality and quantity of surface and ground water adjacent to the site.

1. The development shall adhere to the regulations as required by the Department of Ecology Stormwater Management Manual for Western Washington (2012), as amended.

B. New development shall provide stormwater management facilities designed, constructed, and maintained in accordance with the current stormwater management manual in effect at the time, including the use of best management practices. Additionally, new development shall implement low impact development techniques where feasible and necessary to fully implement the core elements of the stormwater management manual.

C. All shoreline development, both during and after construction, shall avoid or minimize significant ecological impacts, including any increase in surface runoff, through control, treatment, and release of surface water runoff so that water quality and quantity are not adversely affected. Control measures include and are not limited to low impact development techniques, catch basins, settling ponds, oil interceptor drains, grassy swales, planted buffers, and fugitive dust controls.

D. BMPs for control of erosion and sedimentation shall be implemented for all development in shoreline jurisdiction through an approved temporary erosion and sediment control in accordance with the current federal, state, and/or local stormwater management standards in effect at the time.

E. Low impact development techniques shall be considered and implemented to the greatest extent practicable throughout the various stages of development including site assessment, planning and design, vegetation conservation, site preparation, and retrofitting techniques.

F. All materials that may come in contact with water shall be constructed of materials that will not adversely affect water quality or aquatic plants or animals.

H. The application of pesticides or herbicides in shoreline jurisdiction is prohibited except where no reasonable alternative exists and its use is demonstrated to be in the public interest.

1. Only products specifically approved for use in aquatic situations by the Department of Ecology shall be allowed, and then only if used according to approved methods of and standards for application.

2. Herbicides and pesticides shall not be applied or allowed to enter water bodies or wetlands unless approved by the appropriate state and/or federal agencies.

3. Alternatives to the use of chemical fertilizers, herbicides, and pesticides shall be preferred BMPs.

4. The use of time release fertilizer and herbicides shall be preferred over liquid or concentrate application.

5.7 Environmental Impacts

5.7.1 Applicability

The following section applies to all development and uses in shoreline jurisdiction.

5.7.2 Policies

A. The adverse impacts of shoreline uses and activities on the environment should be minimized during all phases of development.

B. All phases of shoreline use and development, including site planning, design, construction, and maintenance, should be carried out in a manner that prevents or mitigates adverse impacts, both on site and to the extent that impacts may propagate up or downstream, so that the resulting ecological condition does not become worse than the current condition.

1. Each use and development must ensure no net loss of ecological functions and processes relative to the existing condition, consistent with all relevant constitutional and other legal limitations on the regulation of private property.

2. Shoreline ecological functions that should be protected include and are not limited to fish and wildlife habitat, wildlife migration corridors, food chain support, and water temperature maintenance.

3. Shoreline processes that should be protected include and are not limited to water flow, erosion and accretion, infiltration, ground water recharge and discharge, sediment delivery, transport, and storage, large woody debris recruitment, organic matter input, nutrient and pathogen removal, and stream channel formation/ maintenance.

C. In assessing the potential for net loss of ecological functions or processes, project-specific and cumulative impacts should be considered.

5.7.3 Regulations

A. All shoreline uses and activities shall be located, designed, constructed, and managed in a manner that minimizes adverse impacts to surrounding land and water uses and is aesthetically compatible with the affected area.

B. All shoreline developments shall be located, designed, constructed, and managed so as not to be a hazard to public health and safety.

C. All shoreline uses and activities shall be located, designed, constructed, and managed to avoid disturbance of and minimize adverse impacts to fish and wildlife resources, including spawning, nesting, rearing and habitat areas and migratory routes.

D. All shoreline uses and activities shall be located, designed, constructed and managed to minimize interference with beneficial natural shoreline processes such as water circulation, sand and gravel movement, erosion, and accretion.

E. For all projects, the applicant shall provide, in addition to the standard permit information requirements contained in WAC 173-27, a report prepared by a qualified professional describing existing conditions/ecological functions and anticipated shoreline environmental impacts (if any). Note that if a critical areas report must also be prepared pursuant to Appendix B, the shoreline and critical areas reports may be submitted as a single report. The report shall demonstrate consistency with the mitigation sequence found in 5.7.3.F of the SMP and conclude that, as mitigated (if any), the proposal will result in no net loss of ecological function.

1. If shoreline environmental impacts are identified, the applicant shall develop and implement a mitigation plan prepared by a qualified professional consistent with the requirements of the critical areas regulations in Appendix B.

    a. The mitigation plan shall demonstrate that all reasonable efforts were taken to mitigate potential adverse impacts to ecological function resulting from new development and redevelopment in shorelines through mitigation sequencing (see definition). Lower priority measures shall be applied only where higher priority measures are determined to be infeasible or inapplicable.

    b. When compensatory mitigating measures are appropriate pursuant to the mitigation sequencing parts (2) through (5), preferential consideration shall be given to measures that replace the impacted functions directly and in the immediate vicinity of the impact.

        i. Alternative compensatory mitigation within the watershed that addresses limiting factors or identified critical needs for shoreline resource conservation based on watershed or comprehensive resource management plans applicable to the area of impact may be authorized.

        ii. Performance and maintenance bonds may be required for the following:

            (A) To ensure required mitigation measures provide no net loss of ecological functions; and

            (B) To ensure the proposal meets all conditions of approval.

    c. The mitigation plan shall achieve no net loss of ecological functions.

F. Mitigation sequencing shall be used for all shoreline projects, which means following a sequence of mitigation measures as defined in WAC 173-26-201(2)(e) that includes the following in order:

1. Avoid the impact altogether by not taking a certain action or parts of an action;

2. Minimize impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts;

3. Rectify the impact by repairing, rehabilitating, or restoring the affected environment;

4. Reduce or eliminate the impact over time by preservation and maintenance operations;

5. Compensate for the impact by replacing, enhancing, or providing substitute resources or environments; and

6. Monitor the required compensation and take remedial or corrective measures when necessary.

6 SHORELINE USES AND MODIFICATIONS

Chapter 6 presents specific policies and regulations that apply to particular uses and modifications. Each section includes policies and regulations.

Policies are statements of principles that guide and determine present and future decisions.

Regulations are rules that govern uses and modifications.

6.1 Shoreline Use and Modification Matrix

A. Table 6-1 indicates which uses and modifications may be allowed or are prohibited in shoreline jurisdiction within each shoreline environment. Accessory uses shall be subject to the same shoreline permit process as its primary use. In the event of conflict between the chart and the written provisions in this SMP, the written provisions shall apply.

B. Authorized uses and modifications are only allowed in shoreline jurisdiction where the underlying zoning allows for it and subject to the policies and regulations of this SMP.

C. Except as otherwise stated, the City's comprehensive plan, zoning regulations, health regulations, and other adopted regulatory provisions apply within shoreline jurisdiction. In the event the provisions of this SMP conflict with other provisions of the City's regulations, the more protective of shoreline ecological functions and processes shall prevail.

D. Uses and modifications that are designated as "P" in the use and modification matrix require either a Shoreline Substantial Development Permit or may be exempt from the requirement to obtain a Shoreline Substantial Development Permit, if identified as exempt in WAC 173-27-040 or as subsequently amended.

E. Exempted uses and modifications are not exempt from the SMA or this SMP and must be consistent with the applicable policies and provisions. An exemption from the Shoreline Substantial Development Permit doesn't exempt the proposed development from obtaining either a Shoreline Variance or Shoreline Conditional Use Permit, if applicable. Exempt uses and modifications are to be construed narrowly and meet the exact terms of the exemption to be considered

F. If any part of a proposed development is not eligible for exemption, then a Shoreline Substantial Development Permit is required for the entire proposed development project.

G. Uses and modifications that are designated as "C" in the use and modification matrix, or are not addressed by the SMP and are considered unclassified, or are specified in the written text in this SMP as requiring a Shoreline Conditional Use Permit are required to obtain a Shoreline Conditional Use Permit. Modifications and uses must obtain a Shoreline Conditional Use Permit even though the development or use does not require

a Shoreline Substantial Development Permit or is exempt from the Shoreline Substantial Development Permit process as listed in WAC 173-27-040.

Table 6-1. Shoreline Use and Modification Matrix.

LEGEND: P = May be allowed subject to Shoreline Substantial Development Permit or Shoreline Exemption requirements C = May be allowed subject to Shoreline Conditional Use Permit requirements D = Dependent on adjacent upland environment X = Prohibited or not applicable (use or modification is not eligible for a Shoreline Variance or Shoreline Conditional Use Permit)	**Special Use**	**Urban Conservancy**	**Natural**	**Aquatic**
Agricultural Activities (SMP 6.5)	X	C	X	X
Aquaculture (SMP 6.6)	C	C	X	P[11]
Boating facilities (SMP 6.7)				
Public, nonmotorized watercraft launch	X	P[1]	X	D
Commercial development (SMP 6.8)	X	P[2]	X	X
Dredging and dredge material disposal (SMP 6.9)				
Water-dependent use	P	C	C	P
Bridge or essential public facility	P	C	C	P
Habitat improvement project	P	C	C	P
Clean up contaminated sediments	P	C	C	P
Dredging for other ecological restoration	C	C	C	C
All other dredging	P	X	X	C
Dredge material disposal	C[4]	C[4]	C[4]	C[4]
Sediment removal from flume	P	NA	NA	NA
Fill (SMP 6.10)	P	P	C[5]	C[6]
Flood hazard reduction (SMP 5.3)				
Dikes, levees	C	C	C	C
Forest practices (SMP 6.11)	C	C	C	X
Industry (SMP 6.12)	X	X	X	X
In-water structural uses (SMP 6.13)				
Barrier dam/flume maintenance activities	P	P	X	D
Barrier dam modification or replacement	C	P	X	D
Flume modification or replacement	P	X	X	D
Other in-water structural uses	C	C	C	C
Mining (SMP 6.14)	X	X	X	X
Piers and docks (SMP 6.15)	X	X	X	X
Recreational development (SMP 6.16)				

LEGEND: P = May be allowed subject to Shoreline Substantial Development Permit or Shoreline Exemption requirements C = May be allowed subject to Shoreline Conditional Use Permit requirements D = Dependent on adjacent upland environment X = Prohibited or not applicable (use or modification is not eligible for a Shoreline Variance or Shoreline Conditional Use Permit)	**Special Use**	**Urban Conservancy**	**Natural**	**Aquatic**
Water-dependent (e.g. boat launch)	P	P	P	P
Water-enjoyment (e.g. public trail)	P	P	P[7]	C
Nonwater-oriented (e.g. restrooms, play fields)	C	C	X	X
Residential development (SMP 6.17)	X	X	X	X
Scientific, historical, cultural, or educational research uses	P	P	P	P
Shoreline habitat and natural systems enhancement projects[9] (SMP 6.18)	P	P	P	P
Shoreline stabilization (SMP 6.19)	P	C	C	C
Signs (SMP 6.20)	P	P	P	C
Transportation and parking (SMP 6.21)				
New road construction	C	C	X[13]	X[12]
Parking, primary	X	X	X	X
Parking, accessory	P	P	C	C
Pedestrian/bicycle trail (impervious trails, 6.16)	P	P	C	D[8]
Pedestrian/bicycle trail (pervious trails, 6.16)	P	P	P	X
Utilities (primary) (SMP 6.22)				
Solid waste disposal	X	X	X	X
Telecommunications facilities[15]	X	X	X	X
New wastewater treatment plant	X	X	X	X
Public water supply wells and corridors	X	P	P[10]	X
Other utilities	P	C	C	X[14]
Vegetation conservation (SMP 5.5)				
Clearing and grading	P	P	C	X

[1] A public, non-motorized watercraft launch only is allowed on public property.

[2] For publicly-owned recreational developments, low-impact, seasonal commercial development that supports or enhances recreational activities may be allowed.

[3] Reserved

[4] Only dredge material or flume sediment disposal for the purpose of shoreline restoration may be allowed.

[5] Minor fills related to the development of unpaved trails may be allowed in the **natural environment** subject to Shoreline Substantial Development Permit.
[6] Fill requires a conditional use permit waterward of the OHWM for all uses except shoreline restoration projects. Also see SMP 6.10.4.B.
[7] Only passive activities, such as nature watching and footpaths, which require minimal development may be allowed in the **natural environment**.
[8] A bridge for the Foothills Trail may be allowed using existing abutments.
[9] Hazardous waste remediation may be allowed.
[10] Public water supply wells and associated corridors only may be allowed in the **natural environment** west of SR410.
[11] Trap and haul facilities, and temporary in-water aquaculture activities are permitted (SMP 6.6.4)
[12] Pedestrian and highway bridges may be allowed for public use.
[13] Highway bridges may be allowed for public use.
[14] Utility lines may be permitted above the water as an ancillary structure to another structure.
[15] Telecommunication facilities shall be authorized to the extent mandated by state and federal law.

6.2 Shoreline Development Standards Matrix

A. To preserve the existing and planned character of the shoreline consistent with the purposes of the shoreline environment designations, shoreline development standards regarding shoreline setbacks and height are provided in Table 6-2. In addition, shoreline developments shall comply with all dimensional requirements of other applicable City codes and the applicable buffer requirements found in Appendix B of this SMP.

B. Consistent with the use allowances for each environment designation, water-dependent uses and permeable public trails may be located at the setbacks identified in Table 6-2 when an intrusion to the shoreline buffer is mitigated. Accessory uses and developments related to the water dependent use shall be located consistent with the applicable setback founding Table 6-2 and buffer found in Appendix B of this SMP. All other uses and development proposed within a shoreline buffer must obtain a Shoreline Variance.

C. The outer 25 percent of the shoreline buffer may be averaged through the process described in SMP Appendix B Section B.2.3.F.3 to accommodate the uses and development in 6.2.D, 6.2.E, and 6.2.F below.

D. Consistent with the use allowances for each environment designation and the setbacks required in Table 6-2 the following uses and development can be placed in the outer 25 percent of the shoreline buffer: essential public facilities and public access facilities may be located in the shoreline buffer if the use or activity cannot be accommodated or accomplished outside of the standard or averaged shoreline buffer. These uses and modifications must be designed and located to minimize intrusion into the buffer and shall also be consistent with all other applicable provisions of this SMP.

E. Where no other practical alternative exists to the excavation for and placement of public water supply wells in a shoreline and critical area buffer, these uses may be permitted in the outer 25 percent of the buffer. A mitigation plan must be prepared by a qualified professional, and must be consistent with the requirements of the critical areas regulations in Appendix B.

F. Impervious trails roughly parallel to the river and associated facilities are considered as water-oriented uses and may be permitted in the outer 25 percent of the shoreline buffers, consistent with the SMP Appendix B. Trails roughly perpendicular to the river may be permitted to the river's edge provided a mitigation plan is prepared by a qualified professional, is consistent with the requirements of the critical areas regulations in Appendix B, and is approved by the city.

G. Where impacts to shoreline or critical area buffers are permitted, and after mitigation sequencing is applied, all projects having impacts on ecological functions shall be required to develop and implement a mitigation plan prepared by a qualified professional consistent with the requirements of the critical areas regulations in Appendix B. All mitigation must be designed to result in no net loss of ecological functions to the extent feasible. The qualified professional shall demonstrate and conclude in the mitigation plan that as mitigated the proposal will result in no net loss of ecological function.

Table 6-2. Shoreline Development Standards Matrix.

LEGEND: **N/A** = Not applicable	**Special Use**	**Urban Conservancy**	**Natural**	**Aquatic**
Setback from OHWM for water-dependent uses	0'	0'	0'	N/A
Setback from OHWM for permeable trails	50'	50'	50'	N/A
Setback from OHWM for impervious trails running parallel to shoreline	150'	150'	150'	N/A
Setback from OHWM for all other development*	150'	150'	150'	N/A
Height** – to be measured from averaged existing grade for land sites or the OHWM for **aquatic environment**	35'	35'	35'	N/A

*River crossings for utilities are subject to 6.22

** Utilities, please see SMP 6.22

6.4 General Shoreline Use and Modification Provisions

6.4.1 Applicability

The following section applies to all upland uses and modifications in shoreline jurisdiction.

6.4.2 Policies

A. Non-water-oriented accessory development that does not require a shoreline location should be located landward of shoreline jurisdiction unless required to serve approved water-oriented uses.

B. When within shoreline jurisdiction, development such as parking, service buildings or areas, access roads, utilities, signs, and materials storage should be located landward of shoreline and/or wetland buffers and landward of water-oriented developments and/or other approved uses.

C. Shoreline use and modifications should be designed to maintain the following functions:

1. Support long-term beneficial use of the shoreline;

2. Protect and maintain shoreline ecological functions and processes;

3. Direct land alteration to the least sensitive portions of the site to maximize vegetation conservation;

4. Minimize impervious surfaces and runoff;

5. Protect riparian, nearshore, and wetland habitats;

6. Protect wildlife and habitats;

7. Protect archaeological, historic and cultural resources, and preserve aesthetic values;

8. Minimize impact to shoreline or upland uses through setbacks, buffers, light shielding, noise attenuation, and other measures; and

9. Prevent degradation of water quality and alteration of natural hydrographic conditions, including disturbance of groundwater recharge and/or discharge points.

D. Development should minimize impacts on shoreline or upland uses through setbacks, buffers, light shielding, noise attenuation, and other measures.

E. All significant adverse impacts to the shoreline should be avoided or, if that is not possible, minimized to the extent feasible and mitigated.

F. Vistas and viewpoints should not be degraded and visual access to the water from such vistas should not be impaired by signs.

G. Shoreline modifications should not be permitted if a modification would:

1. Result in a net loss of shoreline ecological functions;

2. Adversely affect the quality or extent of habitat for native species;

3. Adversely impact other habitat conservation areas; or

4. Interfere with navigation or other water-dependent uses.

6.4.3. Regulations.

A. All shoreline uses and modifications are subject to the mitigation sequencing requirements in Section 5.7, Environmental Impacts, with appropriate mitigation required for any unavoidable impacts to ecological functions. If critical areas in shoreline jurisdiction are affected, the project is also subject to relevant requirements in Appendix B, Shoreline Critical Areas Regulations.

B. All activity on the shoreline shall be accomplished so the structure and associated material does not impair water quality.

C. All disturbed areas shall be temporarily protected from erosion through the use of BMPs, and permanently restored and protected using vegetation and BMPs.

D. Alteration or disturbance of the bank and/or bank vegetation shall be limited to that which is necessary to perform the work.

E. Proposals to temporarily store waste material or re-use waste materials within shoreline jurisdiction may be approved provided that the use of best management practices is adequate to prevent erosion or water quality degradation.

1. For this section, “temporary” shall mean any time limitation given in writing by a state or federal agency, or three months, whichever is longer.

2. Waste storage shall be addressed in the permit or exemption request and be shown on the plans to be outside wetland and shoreline buffers.

3. Construction stockpiling or materials and equipment storage shall be considered with the permit or exemption application and the effects mitigated as appropriate.

F. Development design shall employ the following techniques and/or practices:

1. Structure placement shall conform to natural contours and minimize disturbance to soils and native vegetation;

2. Development shall complement the character and setting of the property;

3. Development shall minimize noise and glare;

a. Building surfaces on or adjacent to the water shall employ materials that minimize reflected light.

b. Interior and exterior lighting shall be designed and operated to avoid illuminating or causing glare on adjacent properties, public areas, the river, or critical areas or their buffers to prevent hazards, to avoid infringing on the use and enjoyment of such areas, and to avoid harming wildlife (including breeding and migration).

c. Roadway or trail lighting shall control light spillover through the following methods: limits on height of structure, limits on fixture light levels, light shields, setbacks, buffer areas, light flow direction, and screening.

4. Development shall avoid impacts to views:

   a. Property screening in the form of fences shall not block visual access to the shoreline.

5. Building mechanical equipment shall be incorporated into building architectural features, such as pitched roofs, to the maximum extent possible. Where mechanical equipment cannot be incorporated into architectural features, a visual screen shall be provided consistent with building exterior materials that obstructs views of such equipment.

6. Outdoor storage areas, if allowed, shall be screened from public view through techniques such as landscaping, fencing and/or other equivalent measures.

7. The release of oil, chemicals, or hazardous materials onto land is prohibited.

   a. Necessary refueling of motorized equipment shall be done outside shoreline jurisdiction.

   b. Equipment for the transportation, storage, handling, or application of such materials shall be set back a distance equal to the setback required for the proposed development and placed securely using BMPs. It shall be maintained in safe and leak proof condition. If there is evidence of leakage, the further use of such equipment shall be suspended until the deficiency is satisfactorily corrected.

   c. Extreme care shall be taken to ensure that no petroleum products, hydraulic fluid, fresh cement, sediments, sediment-laden water, chemicals, or any other toxic or deleterious materials are allowed to enter or leach into a waterbody during in-water development.

   d. Appropriate spill clean-up materials must be on-site at all times, and any spills must be contained and cleaned immediately after discovery.

e. Any spills or leakages must be immediately reported to the Department of Ecology and the shoreline administrator.

8. In addition to all regulations in this section, the following regulations shall apply to in-water work, including but not limited to new structure installation, existing structure repair, restoration projects, and aquatic vegetation removal.

   a. Water-dependent in-water developments are not subject to the shoreline buffers established in this SMP.

   b. In-water work shall be conducted in a manner that causes little or no siltation to adjacent areas.

   c. Modifications and uses located in the **aquatic environment** shall be the minimum size necessary.

   d. A sediment control curtain shall be deployed in those instances in which siltation is possible or expected. The curtain shall be maintained in a functional manner that contains suspended sediments during project installation.

   e. If fish are observed to be in distress or are killed, immediate notification shall be made to appropriate state or federal agency(ies), including the city, Washington Department of Fish and Wildlife, National Marine Fisheries Service and/or US Fish and Wildlife Service.

   f. If water quality problems develop, immediate notification shall be made to the appropriate state or federal agency(ies), including the city, Washington Department of Ecology, National Marine Fisheries Service and/or US Fish and Wildlife Service.

   g. In-water development shall be sited and designed to avoid the need for future shoreline stabilization activities and dredging, shall consider watershed functions and processes, and shall emphasize protecting and restoring priority habitat and species.

   h. Fresh concrete or concrete by-products shall not enter the waterbody at any time during in-water installation. All forms used for concrete shall be completely sealed to prevent the possibility of fresh concrete from entering the waterbody. Waste material resulting from in-water structure installation, such as construction debris, silt, excess dirt, or overburden, shall be deposited outside the shoreline jurisdiction in an approved upland disposal site.

   i. Natural in-water features such as snags, uprooted trees, or stumps should be left in place.

   j. Any trenches**,** depressions, or holes created waterward of the OHWM shall be backfilled.

6.5 Agricultural Activities

6.5.1 Applicability

Please see the definition of "agricultural activities" in Chapter 2 of this SMP.

6.5.2 Policies

A. A vegetative buffer should be maintained between agricultural lands and water bodies or wetlands to:

   1. Reduce harmful bank erosion and sedimentation;

   2. Enhance water quality by slowing and filtering runoff; and

   3. Maintain habitat for fish and wildlife.

B. Appropriate farm management techniques should be used to prevent contamination of nearby water bodies and adverse effects on valuable plant, fish or animal life from fertilizer and pesticide use.

C. Certain agricultural facilities should be placed outside shoreline jurisdiction and constructed to prevent contamination of waterbodies or degradation of the adjacent shoreline environment:

   1. Animal feeding operations;

   2. Retention and storage ponds; and

   3. Feed lot waste and manure storage.

D. Agricultural practices shall prevent and control erosion of soils and bank materials within shoreline areas and minimize siltation, turbidity, pollution, and other environmental degradation of watercourses and wetlands.

6.5.3 Regulations

A. Agricultural development shall be 150 feet from the OHWM and shall adhere to other applicable state and federal policies and regulations provided they are consistent with the SMA and this SMP to ensure no net loss of ecological function.

B. River banks and water bodies shall be protected from damage caused by livestock by placing fencing to prevent bank compaction, bank erosion, or damage to buffer vegetation.

C. Agricultural activities shall use hay bales, properly-installed fabric silt fencing, and other BMPs to control erosion.

D. Agricultural activities shall adhere to the provisions in Section 5.6, Water Quality, Stormwater and Nonpoint Pollution.

E. New manure lagoons, confinement lots, feeding operations, lot wastes, stockpiles of manure solids, aerial spraying, and storage of noxious chemicals are prohibited within shoreline jurisdiction.

F. Conversion of existing agricultural activities to other uses or uses that don't meet the shoreline definition of agriculture shall be in accordance with the policies and regulations for the proposed use.

6.5.4. Environments

A. Agriculture is a conditional use in the urban conservancy, subject to the policies and regulations of this SMP.

B. Agriculture is prohibited in the special use, natural, and **aquatic environments**.

6.6 Aquaculture

6.6.1 Applicability

Aquaculture is the culture or farming of fish or other aquatic plants and animals, as defined in Chapter 2. In-water aquaculture is dependent on the use of the water area and, when consistent with control of pollution and prevention of damage to the environment, it is a preferred use of the water area. Upland aquaculture facilities are water-related and are subject to setbacks. Trap and haul facilities adjacent to the barrier dam shall be regulated as aquaculture.

6.6.2 Policies

A. The city should provide limits and conditions to assure appropriate compatible types of aquaculture for the local conditions as necessary to assure no net loss of ecological functions.

B. Potential locations for aquaculture are relatively restricted because of specific requirements for water quality, temperature, flows, oxygen content, adjacent land uses, and wind protection.

C. The technology associated with some forms of present-day aquaculture is still in its formative stages and experimental. The city recognizes the need for some latitude in the development of this use as well as its potential impact on existing uses and natural systems.

D. Aquaculture should not be permitted in areas where it would result in a net loss of ecological functions, or significantly conflict with navigation and other water-dependent uses.

E. Aquacultural facilities should be designed and located so as not to spread disease to native aquatic life, establish new nonnative species that may cause significant ecological impacts, or significantly impact the aesthetic qualities of the shoreline.

F. Impacts to ecological functions should be mitigated.

6.6.3 Regulations

A. Aquaculture activity shall produce no net loss of shoreline ecological function.

B. Aquaculture facilities shall be designed and located so as not to spread disease to native aquatic life, introduce new nonnative species, or affect the aesthetic qualities of the shoreline.

C. Aquaculture facilities shall be located in areas that will not inhibit public use or enjoyment of the river.

D. Aquaculture facilities shall be located in areas that will not conflict with other water-dependent uses.

E. Impacts to ecological functions shall be mitigated according to mitigation sequencing as defined in SMP Chapter 2.

F. Upland aquaculture facilities shall be set back 150 feet from the OWHM.

G. In-water aquacultural facilities that include capture and haul facilities for wild stock relocation shall be placed in areas where access does not disturb the natural environment.

H. Temporary in-water aquacultural activities shall be those that are placed in the water for less than two weeks.

6.6.4. Environments

A. Trap and haul facilities are allowed in the **aquatic environment**.

B. Temporary in-water aquacultural activities are permitted in the **aquatic environment** according to policies and regulations in this SMP.

C. Upland aquaculture facilities are allowed in the **urban conservancy** and **special use environments** as a conditional use permit.

6.7 Boating Facilities

6.7.1 Applicability

The White River is not a commercially navigable water body. Large commercial vessels will not be used on this section of the White River; it is doubtful that small private motorized vessels or sailboats could be used in this river. The types of vessels most likely to be used on this river include canoe, rafts, and kayaks, which have little draw under them.

6.7.2 Policies

A. Boating facilities are water-dependent uses and, as such, are preferred uses of the shoreline.

B. Boating facilities should be limited to launches along the White River for small, non-motorized watercraft such as kayaks and rafts.

C. Non-motorized watercraft launches should only be located at publicly owned recreational developments where existing or planned facilities would provide accessory uses such as parking, restrooms, and trash receptacles.

D. Non-motorized watercraft launches should be located only where suitable environmental conditions, shoreline configuration, and access exist.

E. Non-motorized watercraft launches should be located and designed to ensure that no net loss of ecological functions or other significant adverse impacts will result.

F. Non-motorized watercraft launches should ensure that health, safety, and welfare requirements are met.

F. Non-motorized watercraft launches should be compatible with neighboring uses.

6.7.3 Regulations

A. Boating facilities shall be limited to launches along the White River for small, non-motorized watercraft such as kayaks and rafts.

B. Non-motorized watercraft launches shall only be located at publicly owned recreational developments where existing or planned facilities would provide accessory uses such as parking, restrooms, and trash receptacles.

C. Parking for non-motorized watercraft launches shall be nine spaces for each launch.

D. Non-motorized watercraft launches shall be located and designed to ensure that no net loss of ecological functions or other significant adverse impacts will result.

E. Non-motorized watercraft launches shall be located and designed to minimize any necessary shoreline modification.

F. Non-motorized watercraft launches shall be up to 20 feet wide per launch and may extend waterward of OHWM five feet.

1. Construction material shall be as recommended by state or federal agencies.

2. Mitigation or restoration measures shall be in accordance with this SMP to cause no net loss of shoreline functions and habitat.

6.7.4. Environments

A. Public non-motorized watercraft boating facilities on public lands are permitted in the **urban conservancy environment** west of the barrier dam, subject to the policies and regulations of this SMP.

B. Boating facilities are permitted in the **aquatic environment** if they are permitted on the adjacent upland environment, subject to the policies and regulations of this SMP.

6.8 Commercial Development

6.8.1 Applicability

The following section applies to all commercial development in shoreline jurisdiction.

6.8.2 Policies

A. Preference should be given to water-dependent commercial uses over non-water-dependent commercial uses.

B. Preference should be given to water-related and water-enjoyment commercial uses over non-water-oriented commercial uses.

C. Commercial development should only be located at publicly owned recreational developments where existing or planned facilities would provide accessory uses such as parking, restrooms, and trash receptacles.

D. Only low-impact, seasonal commercial development that supports or enhances recreational activities should be allowed. Such development might include recreational equipment rentals (e.g. rafts, canoes, or fishing gear), bicycle repair, bait sales, or food and beverage concessions.

6.8.3 Regulations

A. The applicant shall demonstrate to the satisfaction of the City that proposed uses meet the definitions of water-dependent, water-related, or water-enjoyment.

1. Preference shall be given to water-dependent commercial uses over non-water-dependent commercial uses.

2. Preference shall be given to water-related and water-enjoyment commercial uses over non-water-oriented commercial uses.

B. Non-water-oriented commercial uses may be located within shoreline jurisdiction provided that such uses:

1. Are part of a publicly owned recreational development that includes water-oriented uses and/or public access;

2. Are low-impact, seasonal, and in support of recreational activities;

3. Comply with the buffer requirements of this SMP; and

4. Comply with shoreline restoration requirements of this SMP.

C. Commercial development shall only be located at publicly owned recreational developments where existing or planned facilities would provide accessory uses such as parking, restrooms, and trash receptacles.

D. Parking for commercial development shall be the same as provided for other users of publicly owned recreational developments. No additional vehicular access to commercial development shall be provided.

E. Commercial development shall be located, designed, and constructed in a manner that assures no net loss of shoreline ecological functions or significant adverse impacts to other shoreline uses, resources, and values will result.

6.8.4. Environments

A. Commercial development and uses are permitted in the **urban conservancy environment**, subject to the policies and regulations of this SMP.

1. The use must be on publicly-owned land;

2. The commercial use or development must be low-impact, seasonal uses that support or enhance recreational activities; and

3. Setbacks for commercial development shall be as specified in table 6-2.

B. Commercial development or uses are prohibited in the **special use, natural,** and **aquatic environments**.

6.9 Dredging and Dredge Material Disposal

6.9.1 Applicability

Please see the definitions of “dredging” and “development” in Chapter 2 of this SMP.

6.9.2 Policies

A. New development should be sited and designed to avoid or, where avoidance is not possible, to minimize the need for new maintenance dredging.

B. Dredging should be permitted for water-dependent uses and/or essential public facilities when necessary and when alternatives are infeasible or less consistent with this SMP. Dredging as part of ecological restoration or enhancement, public access or public recreation should be permitted if consistent with this SMP.

C. Dredging shall be done in a manner that avoids or minimizes significant ecological impacts. Impacts that cannot be avoided should be mitigated in a manner that assures no net loss of shoreline ecological functions.

D. Dredging should be planned and conducted to minimize adverse impacts to other shoreline uses, properties, and values.

E. Dredging of bottom materials for the primary purpose of obtaining the material for fill or other purposes is strongly discouraged.

F. Dredge material disposal should be prohibited in shoreline jurisdiction, except where dredge material would benefit shoreline resources.

6.9.3 Regulations

A. New development shall be sited and designed to avoid or, where avoidance is not possible, to minimize the need for new maintenance dredging.

B. Dredging shall be permitted only during state or federally specified times to not disturb biological systems for one of the following uses:

1. In conjunction with a water-dependent use of water bodies or adjacent shorelands;

2. In conjunction with a bridge or essential public facility for which there is documented public need and where other feasible sites or routes do not exist;

3. As part of an approved habitat improvement project; or

4. To clean up contaminated sediments.

C. In evaluating permit applications for any dredging project, the adverse effects of the initial dredging and subsequent maintenance dredging shall be considered. Dredging shall be permitted only where it is demonstrated that the proposed actions will not:

1. Result in significant and/or ongoing damage to water quality, fish, and other essential biological elements; and

2. Adversely alter natural drainage and circulation patterns or significantly reduce flood water capacities.

D. When dredging is permitted, the dredging shall be the minimum necessary.

E. Dredging shall employ best management practices to prevent water quality impacts or other environmental degradation.

F. Dredging shall not occur in wetlands.

G. Consistent with the mitigation sequencing steps outlined in Section 5.7.3.E., dredging proposals should be first designed to avoid and minimize ecological impacts, prior to pursuing mitigation. When required, mitigation plans shall be prepared by a qualified professional and shall be consistent with the City's requirements for mitigation plans.

H. Dredging shall be carefully scheduled to protect biological productivity (e.g. fish runs) and to minimize interference with other shoreline activities (e.g. fishing).

I. Limitations on dredging operations may be imposed to reduce proximity impacts, protect public safety and assure compatibility with the interests of other shoreline users. Conditions may include limits on periods and hours of operation, type of machinery, and may require provision of landscaped buffer strips and/or fencing to address noise and visual impacts.

J. Dredging waterward of the OHWM for the primary purpose of obtaining fill material shall not be allowed, except when the material is necessary for the restoration of ecological functions. When allowed, the site where the fill is to be placed must be located waterward of the OHWM. The project must either be associated with a Model Toxics Control Act or Comprehensive Environmental Response, Compensation, Liability Act habitat restoration project or, if approved through a Shoreline Conditional Use Permit, any other significant habitat enhancement project.

K. Dredge material disposal is prohibited in shoreline jurisdiction under this SMP, except when for one or more of the below-listed reasons and a Shoreline Conditional Use Permit is obtained:

1. For wildlife habitat improvement or shoreline restoration; or

2. To correct problems of material distribution adversely affecting fish and wildlife resources.

6.9.4. Environments

A. Dredging for restoration purposes related to MTCA and CRCLA is permitted in the **aquatic environment**.

1. Dredging for other ecological restoration is a conditional use in all **environments**, subject to the policies and regulations of this SMP.

B. Dredging is a conditional use in the **natural** and **urban conservancy environments** for ecological restoration and/or removing toxic substances.

C. Dredge material disposal may be allowed as a conditional use in **all environments** for approved shoreline restoration activities.

6.10 Fill

6.10.1 Applicability

Please see the definition of "fill" in Chapter 2 of this SMP. Note that the regulations in this section apply to fills in both aquatic and upland **environments**.

6.10.2 Policies

A. Fills should be the minimum necessary to provide for the proposed use and permitted only when tied to a specific development proposal that is allowed by this master program.

B. Shoreline fills should be designed and located so that no significant damage will occur to existing ecological functions and processes or natural resources.

   1. Shoreline fills should prevent alteration of local currents, surface water drainage, or flood waters that could result in a hazard to adjacent life, property, and natural resource systems.

C. The perimeter of fills should be designed to avoid or eliminate erosion and sedimentation impacts, both during initial fill activities and over time.

   1. Fills that do not require containment structures are preferred.

D. In addition to other permit review criteria, when evaluating fill projects, the following factors should be reviewed and added in the report required by Section 5.7.3.E:

   1. Potential and current public use of the shoreline and water surface area;

   2. Water flow and drainage;

   3. Water quality impacts; and

   4. Habitat impacts.

6.10.3 Regulations

A. Where fills are allowed, the fill shall be the minimum necessary to accommodate the proposed use.

B. Fills may be permitted when tied to a specific development proposal that is allowed by this master program.

C. Fills waterward of the OHWM shall require a Shoreline Conditional Use Permit, and shall be shown to be necessary to support:

   1. A water-dependent use;

   2. Public access;

   3. Cleanup and disposal of contaminated sediments as part of an interagency environmental clean-up plan; and/or

   4. Expansion or alteration of transportation facilities currently located on the shoreline, and then only on a demonstration that alternatives to fill are not feasible.

D. In addition to permit review criteria, fill may be permitted only where it is demonstrated that the proposed action will not:

   1. Result in significant damage to water quality, fish, and/or wildlife habitat;

   2. Adversely alter natural drainage and circulation patterns, currents, river and tidal flows or significantly reduce flood water capacities; or

   3. Intrude into wetlands unless it is shown that no alternative exists.

E. Fills shall be located, designed and constructed to protect shoreline ecological functions and ecosystem-wide processes, including channel migration.

F. Fills shall be designed, constructed, and maintained to prevent, minimize, and control all material movement, erosion, and sedimentation from the affected area.

   1. Perimeters of permitted fill projects shall be designed and constructed with silt curtains, vegetation buffer areas or other methods, and be appropriately sloped to prevent erosion and sedimentation both during initial fill activities and afterwards. Containment practices will be implemented until the fill is stabilized and the risk or erosion is past.

   2. The placement of fills shall be designed to not require stabilization or containment structures unless demonstrated to be infeasible because of existing site conditions.

G. Fills shall be designed to blend physically and visually with existing topography whenever possible, and not interfere with long term appropriate uses including lawful access and enjoyment of scenery.

H. Fill materials shall be sand, gravel, soil, rock or similar material. Use of polluted dredge spoils, solid waste, and sanitary landfill materials are prohibited.

6.10.4. Environments

A. Fill is permitted in the **special use** and **urban conservancy environments** subject to the policies and regulations of this SMP.

B. Fill in the **aquatic environment** for ecological restoration, beach nourishment or enhancement project(s) is permitted, subject to the policies and regulations of this SMP.

   1. Fill for all other uses require a Shoreline Conditional Use Permit and shall be allowed only when necessary to support the following:

      a. Water-dependent use(s);

      b. Public access;

      c. Cleanup and disposal of contaminated sediments as part of an interagency environmental clean-up plan;

d. Disposal of dredged material considered suitable under, and conducted in accordance with the dredged material management program of the Department of Natural Resources;

e. Expansion or alteration of transportation facilities of statewide significance currently located on the shoreline, and then only on a demonstration that alternatives to fill are not feasible; and/or

f. Mitigation action.

C. Fill is a conditional use in the **natural environment** subject to the policies and regulations of this SMP, provided the fill is minor and related to the development of permeable trails.

6.11 Forest Practices

6.11.1 Applicability

Please see the definition of "forest practices" in Chapter 2 of this SMP. Forest practices do not include tree marking, surveying and road flagging, removal or harvesting of incidental vegetation from forest lands such as berries, ferns, greenery, mistletoe, herbs, or mushrooms. A forest practice that only involves timber cutting is not a development under the act and does not require a shoreline substantial development permit or a shoreline exemption. Forest practices that include development may also be required to obtain a substantial development permit.

6.11.2 Policies

A. Forest practices should be conducted to maintain or enhance existing:

1. Water quality, water quantity, and fish habitat; and

2. Upland wildlife habitat.

B. Forest practices should be avoided on shorelines with slopes of such grade and/or soil type that would likely cause serious sediment runoff, unless adequate restoration and erosion control can be accomplished.

C. Special attention should be directed to forest practices activities including logging and thinning to prevent the accumulation of slash and other debris in contiguous waterways and their floodplains.

D. Skid roads and fire trails should not disturb shoreline resources. They should be rehabilitated as necessary to prevent erosion and import of sediments into contiguous waterways.

E. Reforestation in shorelines should be done as quickly as possible:

1. Replanting or seeding should be done with native species common to the area.

F. All forest practices undertaken on shorelines shall comply with the applicable policies and provisions of the Forest Practices Act, RCW 76.09 as amended (WAC 222).

6.11.3 Regulations

A. Conversion from forest to non-forest uses, as defined by the Forest Practices Act Type IV General, shall show no net loss of shoreline habitat or function. The following minimum standards shall be used:

1. Low-impact development standards shall be used;

2. Revegetation in accordance with this Shoreline Master Program;

3. Deforestation shall not occur until the development's building permits are approved. Time may be added to the shoreline permit's expiration date to accommodate this requirement; and

4. Cutting shall be outside required wetland buffers and setbacks.

B. Within shoreline jurisdiction along shorelines of statewide significance, only selective commercial timber cutting may be permitted so that no more than 30 percent of the merchantable timber may be harvested in any 10-year period; provided that other timber harvesting methods may be permitted with a Shoreline Conditional Use Permit in those limited instances where topography, soil conditions or silviculture practices necessary for regeneration render selective logging ecologically detrimental.

C. Buffer strips on or adjacent to steep slopes shall be protected by leaving stumps high enough to prevent any subsequently felled upslope trees from sliding or rolling into the strips.

D. Skid roads, fire trails, and other erosion-prone conditions caused by forest practices operations shall be water-barred, as needed, on completion of the activity.

1. Shorelines that contain steep slopes or a soil type that may cause sediment runoff require adequate restoration and erosion control measures. An erosion control plan shall be submitted with the application. A restoration plan shall also be submitted with the application.

2. Logged areas on slopes exceeding 40 percent shall also be replanted and stabilized, as necessary, within one year of harvest.

E. Trees shall be directionally felled away from wetlands.

F. Replanting or seeding required under the Forest Practices Act shall be done within eighteen months of harvest.

G. Site preparation by burning is prohibited.

6.11.4. Environments

A. Forest practices are a conditional use in the **special use, urban conservancy,** and **natural environments**, subject to the policies and regulations of this SMP.
B. Forest practices are prohibited in the **aquatic environment**.

6.12 Industry

Industry is prohibited in shoreline jurisdiction under this SMP.

6.13 In-Water Structures

6.13.1 Applicability

In-water structure means a structure placed by humans within a river waterward of the OHWM that either causes or has the potential to cause water impoundment or the diversion, obstruction, or modification of water flow. In-water structures may include those for hydroelectric generation, irrigation, water supply, flood control, transportation, utility service transmission, fish habitat enhancement, or other purpose.

6.13.2 Policies

A. In-water structures should be planned and designed to be compatible with appropriate multiple uses of resources over the long-term. Appropriate multiple uses include and are not limited to public access, recreation, and fish migration.

B. The location, design, construction, and maintenance of in-water structures and any associated facilities should consider:

1. The full range of public interests;

2. Watershed processes, including prevention of damage to other properties and other shoreline resources from alterations to geologic and hydrologic processes; and

3. Ecological functions, with special emphasis on protecting and restoring priority habitats and species.

C. In-water structures shall be sited and designed consistent with appropriate engineering principles, including but not limited to guidelines of the Washington Department of Fish and Wildlife, Natural Resources Conservation Service, and the US Army Corps of Engineers.

D. Non-structural and non-regulatory methods to protect, enhance and restore shoreline ecological functions and processes, and other shoreline resources, such as public facility and resource planning, land or easement acquisition, education, voluntary protection and enhancement projects, or incentive programs, should be encouraged as an alternative to in-water structures.

E. Planning and design of in-water structures should be consistent with and incorporate elements from applicable watershed management and restoration plans and/or surface water management plans.

F. In-water structure proposals, if applicable, should:

1. Incorporate native vegetation to enhance ecological functions;

2. Create a more natural appearance; and

3. Improve ecological processes.

G. In-water features, if applicable, should include:

1. Vegetative stabilization including brush matting and buffer strips; and

2. Retention of existing trees and shrubs on stream banks.

H. New or expanded development or uses in the shoreline, including subdivision of land, that would likely require structural flood control works within the river, channel migration zone, or floodway should be prohibited.

I. In-water structures shall be constructed and maintained in a manner that does not degrade the quality of affected waters.

6.13.3 Regulations

A. To prevent loss of shoreline ecological functions and processes, upland cut-and-fill slopes and back-filled areas resulting from installation of in-water structures and any associated facility located upland shall be stabilized with brush matting and buffer strips and revegetated with native grasses, shrubs, or trees.

B. Best available science shall be used to eliminate siltation and erosion before, during, and after the development is installed.

C. Natural in-water features such as snags, uprooted trees, or stumps shall be left in place unless it is demonstrated that they cause severe bank erosion or higher flood stages, or pose a hazard to navigation or to human safety.

D. In-water structures and any associated facility located upland shall allow natural groundwater movement and surface runoff.

E. In-water structures and any associated facility located upland shall preserve valuable recreation resources and aesthetic values, including point and channel bars, islands, and braided channels.

F. In-water structures and any associated facility located upland shall be designed by a qualified professional.

G. Design of in-water structures shall include access to public shorelines unless it is demonstrated that public access would cause:

1. Unavoidable public health and safety hazards;

2. Security problems;

3. Unmitigatable ecological impacts;

4. Unavoidable conflicts with proposed uses; or

5. Unreasonable cost.

H. In-water structures shall not decrease public access or shoreline use potential.

I. In-water structures shall be designed to prevent safety hazards or obstructions for recreational navigation.

J. Channelization projects that damage fish and wildlife resources, degrade recreation and aesthetic resources, result in a net loss of ecological functions or result in high flood stages and velocities are prohibited.

6.13.4. Environments

A. Barrier dam maintenance activities for in-water structures are regulated as follows in the **environments** and are subject to the policies and regulations of this SMP:

1. Permitted in the **special use environment** subject to the policies and regulations of this SMP.

2. Prohibited in the **urban conservancy** and **natural environments**.

3. The same in the **aquatic environment** as in the adjacent upland environment.

B. Barrier dam/flume modification or replacement is regulated as follows in the **environments** and are subject to the policies and regulations of this SMP:

1. A conditional use permit is required in the **special use environment**.

2. Prohibited in the **urban conservancy** and **natural environments**.

3. The same as in the **aquatic environment** as the adjacent upland environment.

C. Other in-water structures and their associated upland structures are conditional uses in all **environments**, subject to the policies and regulations of this SMP.

6.14 Mining

Mining is prohibited in shoreline jurisdiction under this SMP.

6.15 Piers and Docks

Piers and docks are prohibited in shoreline jurisdiction under this SMP.

6.16 Recreational Development

6.16.1 Applicability

Recreational development includes commercial and public facilities designed and used to provide recreational opportunities to the public.

6.16.2 Policies

A. Shoreline recreational development should be primarily related to access to, enjoyment of, and use of the water and shoreline of the state.

B. The coordination of local, state, and federal recreation planning should be encouraged to satisfy recreational needs.

1. Shoreline recreational developments should be consistent with all adopted park, recreation and open space plans.

C. A variety of compatible recreational experiences and activities should be encouraged to satisfy diverse recreational needs.

D. The use of shoreline street ends and publicly owned lands for public access and development of recreational opportunities should be encouraged.

E. The linkage of shoreline parks, recreation areas, and public access points with linear recreational features, such as hiking and bicycle trails, should be encouraged.

F. Recreational developments should be compatible with natural features and adjacent land and water uses.

G. All recreational developments should make adequate provisions for:

1. Vehicular and non-motorized access, both on-site and off-site;

2. Water supply, wastewater, and trash disposal;

3. Security and fire protection;

4. The prevention of overflow and trespass onto adjacent properties, including but not limited to landscaping, fencing and posting of property; and

5. Buffering adjacent areas.

H. Development related to the Foothills Trail, including a potential crossing over the White River using existing abutments, is encouraged.

I. Non-water-oriented recreational development should be located outside shoreline jurisdiction.

6.16.3 Regulations

A. Non-water-oriented accessory recreational development, such as restrooms, access roads, parking lots, and maintenance facilities shall be located outside shoreline jurisdiction if feasible.

   1. If infeasible, the development shall be set back as far as possible landward from the associated recreational development.

   2. All accessory recreational development shall comply with the buffer requirements of this SMP.

B. Recreational development shall be located, designed, and constructed in a manner that assures no net loss of shoreline ecological functions.

C. For recreation developments such as playfields that require the use of fertilizers, pesticides, or other chemicals, the applicant shall submit plans demonstrating the best management practices and methods to be used to prevent these applications and resultant leachate from entering adjacent water bodies. Natural management methods are preferred over synthetic methods where feasible and practical. See Section 5.5, Vegetation Conservation.

D. No recreational buildings or structures shall be built in or over water, except water-dependent and/or public access structures.

E. Recreational developments shall provide facilities for non-motorized access to the shoreline, such as pedestrian and bicycle paths.

F. Proposals for recreational development shall include adequate facilities for water supply, wastewater, and trash disposal.

G. Recreational facilities shall make adequate provisions, such as screening, buffer strips, fences and signs, to prevent overflow and to protect the value and enjoyment of adjacent or nearby private properties and natural areas.

H. Trail development shall follow topographic lines to reduce the amount of cut and fill. Trail development shall follow the following preferences:

   1. Permeable trails are preferred. Some trails must also be accessible to wheeled chairs and bicycles and will need to be impervious;

   2. Pervious concrete, grasscrete, or other permeable material is preferred;

   3. Concrete or asphalt is the last choice for trails; and

   4. Trails around wetlands, if allowed, may be raised above the vegetation.

6.16.4. Environments

A. Water-dependent recreational development is permitted in the **all environments**, subject to the policies and regulations of this SMP:

B. Water-enjoyment recreational development is permitted in the all landward **environments**, subject to the policies and regulations of this SMP, provided only passive activities is allowed in the **natural environment**, for which minimal development is required (e.g. trails)

C. Water-enjoyment recreational development is a conditional use in the **aquatic environment** subject to the policies and regulations of this SMP.

D. Impervious trail development for pedestrians and bicycles is permitted in the **special use** and **urban conservancy environments**, subject to the policies and regulations of this SMP.

E. Impervious trail development for pedestrians and bicycles is a conditional use in the **natural environment**, subject to the policies and regulations of this SMP.

F. Impervious trail development for pedestrians and bicycles may be permitted over the **aquatic environment**, subject to the policies and regulations of this SMP.

G. Pervious trail development is permitted in **all upland environments**, subject to the policies and regulations of this SMP.

H. Non-water-oriented recreational development is a conditional use in the **special use** and **urban conservancy environments**, subject to the policies and regulations of this SMP

I. Non-water-oriented recreational development is prohibited in the **natural,** and **aquatic environments**.

6.17 Residential Development

Residential development is prohibited in shoreline jurisdiction under this SMP.

6.18 Shoreline Habitat and Natural Systems Enhancement Projects

6.18.1 Applicability

Shoreline habitat and natural systems enhancement and restoration projects include those activities proposed and conducted specifically for the purpose of establishing, restoring, or enhancing habitat for priority species in shorelines.

6.18.2 Policies

A. This SMP supports habitat and natural systems enhancement projects, provided the primary purpose is clearly restoration of the natural character and ecological functions of the shoreline.

B. Shoreline habitat and natural systems enhancement projects may include shoreline modification actions such as:

1. Modification of vegetation;

2. Removal of nonnative or invasive plants;

3. Shoreline stabilization;

4. Dredging; and

5. Filling.

C. Restoration and enhancement actions should:

1. Improve shoreline ecological functions and processes; and

2. Target meeting the needs of sensitive plant, fish, and wildlife species, as identified by the Washington Department of Fish and Wildlife, Washington Department of Natural Resources, National Marine Fisheries Service and/or US Fish and Wildlife Service.

D. The City should give priority to projects consistent with the restoration plan approved as part of this SMP update or other approved restoration plans.

E. Funding should be sought from state, federal, private and other sources to implement restoration, enhancement, and acquisition projects, particularly those that are identified in the restoration plan of this SMP or other approved restoration plans.

6.18.3 Regulations

A. Shoreline restoration and ecological enhancement projects may be permitted provided:

1. The project's purpose is the restoration of natural character and ecological functions of the shoreline; and

2. It is consistent with this SMP's restoration plan.

B. Shoreline restoration and enhancement projects shall be designed using the best available scientific and technical information, and implemented using best management practices.

C. Shoreline restoration and enhancement shall not create negative secondary impacts on ecological processes or functions, natural resources, or adjacent properties.

D. Shoreline restoration and enhancement shall not interfere with the normal public use of the waters of the state.

E. Any unavoidable effect or interference shall provide mitigation to restore ecological processes, functions, and/or public use of the shorelines.

F. Maintenance and monitoring, at least annually for a period of five years, is required for shoreline habitat and natural systems enhancement and restoration projects.

1. Maintenance and monitoring shall be backed by a performance bond.

G. The city may grant relief from shoreline master program development standards and use regulations resulting from shoreline restoration projects within urban growth areas consistent with criteria and procedures in WAC 173-27-215.

6.18.4. Environments

A. Shoreline habitat and natural systems enhancement is permitted in **all environments** subject to the policies and regulations of this SMP.

6.19 Shoreline Stabilization

6.19.1 Applicability

Shoreline stabilization includes measures taken to address erosion impacts to property, businesses, or structures caused by natural processes, such as flood, wind, or water action. These measures include structural and nonstructural methods.

Nonstructural methods include shoreline buffers or setbacks, relocation of the structure to be protected, groundwater management, planning and regulatory measures to avoid the need for structural stabilization.

Structural methods include "hard" and "soft" structural stabilization measures. Generally, the harder the construction measure, the greater the impact on shoreline processes, including sediment transport, geomorphology, and biological functions.

"Hard" structural shoreline stabilization means shoreline erosion control practices using hardened structures that armor and stabilize the shoreline from further erosion. Hard structural shoreline stabilization typically uses concrete, boulders, dimensional lumber or other materials to construct linear, vertical or near-vertical faces. These include bulkheads, riprap, and similar structures.

"Soft" structural shoreline stabilization means shoreline erosion control and restoration practices that contribute to restoration, protection, or enhancement of shoreline ecological functions. Soft structural shoreline stabilization typically includes a mix of gravels, cobbles, boulders, logs and native vegetation placed to provide shore stability in a non-linear, generally sloping arrangement.

For purposes of this section:

Enlargement of an existing structural shoreline stabilization shall include additions to, or increases in size (such as height, width, length, or depth) of, existing shoreline stabilization measures and these enlargements shall be considered new structures.

Replacement means the construction of a new structure to perform a shoreline stabilization function of an existing structure that can no longer adequately serve its purpose.

Replacement structures must be comparable to the original structure including but not limited to its size, shape, configuration, location, and external appearance, and the replacement does not cause substantial adverse effects to the shoreline resources or environment.

6.19.2 Policies

General Policies

A. Shorelines existing in their natural state should be preserved in their natural state, free of shoreline modification.

B. Where feasible, structures should be located and designed to avoid the need for future shoreline stabilization.

C. Land subdivisions should be designed to assure that future development of the created lots will not require shore stabilization for reasonable development to occur.

D. New development that would require shoreline stabilization that would likely cause significant impacts to adjacent or down-current properties and shoreline areas should be prohibited.

E. Shoreline stabilization should not be permitted when it interferes with public access to shorelines of the state or other appropriate shoreline uses.

F. Shoreline stabilization should be developed in a coordinated manner among affected property owners and public agencies, particularly those that cross jurisdictional boundaries.

    1. Where erosion threatens existing development, a comprehensive program for shoreline management should be established by the affected property owners.

G. Provisions for multiple use, restoration, and/or public shore access should be incorporated into the location, design, and maintenance of shore stabilization for public or quasi-public developments whenever safely compatible with the primary purpose.

H. Shoreline stabilization should be located, designed, and maintained to protect, restore and maintain:

    1. Shoreline ecological functions;

    2. Ongoing shoreline processes; and

    3. The integrity of shoreline features.

I. Shoreline stabilization should not be developed for the purpose of filling shorelines.

J. When stabilization is necessary, mitigation for the loss of ecological function should be required.

K. Alternative methods (such as “log jams”) that can provide stabilization as well as fish habitat should be included in project alternatives.

L. Shoreline stabilization should be located and designed to fit the physical character and hydraulic energy potential of a specific shoreline reach, which may differ substantially from adjacent reaches.

M. The hierarchy of preference for shoreline stabilization should be based on the following:

1. No action (allow the shoreline to retreat or change naturally), increase buffers, and relocate structures;

2. Non-structural solutions;

3. Soft shoreline structural stabilization; and

4. Hard shoreline structural stabilization. Hard structural shoreline stabilization measures should only be used when soft stabilization methods are determined to be:

a. Infeasible; or

b. Insufficient to achieve enhancement, restoration or remediation objectives.

N. New or expanded structural shoreline stabilization should only be permitted only if demonstrated to be necessary to protect an existing primary structure that is in danger of loss or substantial damage, and where mitigation of impacts would not cause a net loss of shoreline ecological functions and processes.

O. Materials used for construction of shoreline stabilization should be selected for long-term durability, ease of maintenance, and compatibility with local shoreline features, including aesthetic values, ability to provide fish and wildlife habitat, and flexibility for future uses.

1. The preferred “soft” or “non-structural stabilization” measures are more natural and flexible, and include placing the development farther from the OHWM, planting vegetation, installing on-site drainage improvements, and bioengineering techniques.

P. Projects that use vegetative materials to stabilize shorelines or treat erosion should follow recommended BMPs for establishing or restoring vegetation in shoreline and riparian areas, including that from:

1. The Natural Resources Conservation Service;

2. The Washington Department of Fish and Wildlife;

3. The Washington Department of Ecology; and

4. Local conservation districts.

Q. In addition to conformance with the regulations in this section, non-regulatory methods to protect, enhance, and restore shoreline ecological functions and other shoreline resources should be encouraged for shore stabilization. Non-regulatory methods may include public facility and resource planning, technical assistance, education, voluntary enhancement and restoration projects, or other incentive programs.

6.19.3 Regulations

General

A. New development shall be located and designed to avoid the need for future shoreline stabilization to the extent feasible for the life of the development. This shall be shown using geotechnical analysis of the site and shoreline characteristics.

B. Subdivision of land shall be designed to insure the lots created will not require shoreline stabilization for the life of the plat in order for reasonable development to occur.

C. New development on steep slopes or bluffs shall be set back in accordance with a geotechnical analysis that shows that shoreline stabilization is unlikely to be necessary during the life of the development.

D. New development that would likely require shoreline stabilization shall be prohibited.

E. In all cases, the feasibility of non-structural and soft-structural shoreline stabilization methods shall be evaluated and shown to be infeasible before hard structural stabilization may be allowed.

F. In all cases, shoreline stabilization shall be designed so that net loss of ecological functions does not occur.

G. New structural shoreline stabilization measures, including both hard and soft structural shoreline stabilization measures, shall include measures installed to address erosion impacts.

New or Enlarged Hard or Soft Structural Stabilization Measures

H. New or enlarged structural stabilization measures are allowed when, in addition to any permit requirements. the following are also met:

1. The stabilization is to protect an existing primary structure. The primary structure must be shown by a geotechnical analysis that the primary structure is in danger of failing within three years. Normal sloughing, erosion of steep bluffs, or shoreline erosion itself, without a scientific or geotechnical analysis, is not demonstration of need. The geotechnical analysis must evaluate on-site drainage issues and address

drainage problems away from the shoreline edge before considering hard or soft structural shoreline stabilization; or

2. The stabilization supports new non-water-dependent development when all of the conditions below apply:

    a. The erosion is not being caused by upland conditions, such as drainage and the loss of vegetation;

    b. Nonstructural measures, such as placing the development farther from the shoreline, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient to adequately address erosion impacts;

    c. The need to protect primary structures from damage because of erosion is demonstrated through a geotechnical report; and

    d. The damage must be caused by natural processes; or

3. The stabilization supports water-dependent development when all of the following conditions apply:

    a. The erosion is not being caused by upland conditions, such as drainage and the loss of vegetation;

    b. Nonstructural measures, such as planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient to adequately address erosion causes or impacts; and

    c. The need to protect primary structures from damage from erosion is demonstrated through a geotechnical report.

4. To protect projects for the restoration of ecological functions or hazardous substance remediation projects pursuant to Chapter 70.105D RCW when nonstructural measures, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient to adequately address erosion causes or impacts.

<u>Replacement Hard or Soft Structural Stabilization Measures</u>

I. An existing shoreline stabilization structure may be replaced with a similar structure to perform a shoreline stabilization function if the applicant demonstrates a need to protect the principal use or structure from erosion caused by the river. The following regulations apply to replacement of existing hard and soft structural shoreline stabilization measures:

    1. Hard and soft shoreline stabilization measures may allow some fill waterward of the OHWM to provide enhancement of shoreline ecological functions;

2. The replacement structure shall be designed, located, sized and constructed with no net loss of ecological functions;

3. For shoreline stabilization projects, replacement occurs when the existing structure, including its footing or bottom course of rock, is removed before installing new shoreline stabilization materials. Repairs that involve only removal of material above the footing or bottom course of rock are not considered replacements; and

4. Areas of temporary disturbance within the shoreline buffer shall be returned to their pre-project condition or better;

    a. Any required replanting shall be installed in the first available planting season; and

    b. Other areas of temporary disturbance shall be returned to their pre-project condition or better within one week of project completion.

Maintenance and Repair of Hard or Soft Structural Stabilization Measures

J. Maintenance and repair of existing shoreline stabilization measures shall be allowed, subject to all of the following standards. Note that although repair of shoreline stabilization structures may meet the criteria for exemption from a Shoreline Substantial Development Permit, they are not exempt from the policies and regulations of this Section or the SMP:

    1. Maintenance and repair shall include modifications or improvements to an existing shoreline stabilization measure that are designed to ensure the continued function of the stabilization measure by preventing failure of any part of the stabilization measure.

    2. Temporarily disturbed areas within the shoreline buffer shall be returned to their pre-project condition or better:

        a. Any replanting required shall be installed in the first available planting season; and

        b. Other areas of temporary disturbance shall be returned to their pre-project condition or better within one week of project completion.

Hard or Soft Structural Stabilization Design

K. When a hard or soft structural shoreline stabilization measure is demonstrated to be necessary, the following design regulations shall be followed:

    1. The size of all structural stabilization measures shall be the minimum necessary.

    2. Soft structural shoreline stabilization shall be used to the maximum extent practicable for new, enlarged, or replacement shoreline stabilization measures.

a. Hard structural shoreline stabilization shall be limited to the portion or portions of the site necessary to protect or support existing shoreline structures or trees, or where necessary to connect to existing shoreline stabilization measures on adjacent properties.

3. Shoreline stabilization measures shall not extend waterward more than the minimum amount necessary, except for those elements that enhance shoreline ecological functions and minimize impacts.

4. The shoreline stabilization measure shall be designed to not interfere with normal surface and/or subsurface drainage into the adjacent waterbody.

5. The shoreline stabilization measure shall be designed to ensure that it does not restrict public access to the shoreline. When a structural shoreline stabilization measure is required at a public access site, provisions for safe access to the water shall be incorporated into the shoreline stabilization structure design.

    a. Access measures shall not extend farther waterward than the face of the shoreline stabilization measure or the OHWM.

6. Natural features such as snags, stumps or uprooted trees that support fish and other aquatic systems shall be left undisturbed.

7. For enlarged or replacement soft and hard structural shoreline stabilization measures, the following location and design standards are preferred in descending order:

    a. Excavation and fill activities associated with the soft or hard structural shoreline stabilization landward of the existing OHWM; and/or

    b. Where Subsection a above is not practicable because of overriding safety or environmental concerns, necessary excavation and fill activities may be waterward of the existing OHWM as needed to implement a soft structural shoreline stabilization technique or to mitigate the impacts of hard structural shoreline stabilization.

8. Shoreline stabilization measures shall mitigate any harmful impacts to ecological functions by incorporating the following measures, at a minimum, into the design:

    a. Restore appropriate substrate conditions waterward of the OHWM, to include substrate composition and gradient. The material should be sized and placed to remain stable during a two-year flood event;

    b. Plant native riparian vegetation, as necessary, along the shoreline frontage affected by the new or enlarged stabilization; and

    c. Additional mitigation measures may be required by the City, or state or federal agencies.

9. All approved new, enlarged, repair, or replacement shoreline stabilization measures must minimize and mitigate any adverse impacts to ecological functions resulting from short-term construction activities. Impact minimization techniques may include compliance with appropriate timing restrictions, use of best management practices to prevent water quality impacts related to upland or in-water work, and stabilization of exposed soils following construction.

10. Upon project completion, all disturbed shoreline areas shall be restored to as near pre-project configuration as possible and replanted with native grasses, shrubs, and/or trees in keeping with existing bank vegetation.

11. If repair or replacement shoreline stabilization measures intended to improve ecological functions shift the OHWM landward of the pre-modification location and result in expansion of the shoreline jurisdiction on any property other than the subject property, the plan shall not be approved until the applicant submits a copy of a statement signed by the property owners of all affected properties, in a form approved by the City and recorded with Pierce County, consenting to the shoreline jurisdiction creation and/or increase on such property.

Soft Structural Stabilization Design

L. In addition to the above design regulations applicable to both hard or soft structural shoreline stabilization measures, soft structural shoreline stabilization measures shall adhere to the following design regulations:

1. The soft shoreline stabilization design shall provide sufficient protection of adjacent properties by tying in with the existing contours of the adjoining properties to prevent erosion at the property line.

    a. When hard structural shoreline stabilization measures are required because of neighboring hard-structural measures, the tie into existing hard structures shall be allowed only within 10 feet of the property lines.

    b. The length of hard structural shoreline stabilization transition area to adjacent properties should be minimized to the greatest extent practicable.

    c. The hard structural shoreline stabilization transition area shall not extend waterward of the OHWM, except as necessary to connect to the adjoining stabilization, and shall not extend onto the adjacent property.

2. The soft shoreline stabilization design shall size and arrange any gravels, cobbles, logs, and boulders so that the project remains stable during a two-year flood event and dissipates current energy, without presenting extended linear faces to oncoming currents.

Hard Structural Stabilization Design

M. In addition to the above design regulations applicable to both hard or soft structural shoreline stabilization measures, hard structural shoreline stabilization measures shall adhere to the following design regulations if feasible:

1. Hard structural shoreline stabilization measures shall be sloped landward to provide some dissipation of river energy and increase the quality or quantity of nearshore shallow-water habitat.

2. In those cases when hard structural shoreline stabilization is approved on a site where hard structural shoreline stabilization is not located on adjacent properties, the construction of hard structural shoreline stabilization shall tie in with the existing contours of the adjoining properties so the proposed stabilization will not cause erosion of the adjoining properties.

3. When hard structural shoreline stabilization is approved on a site where hard structural shoreline stabilization is located on adjacent properties, the proposed stabilization may tie in flush with existing stabilization measures on adjoining properties, provided that the new stabilization does not extend waterward of the OHWM, except as necessary to make the connection to the adjoining stabilization.

4. Fill behind hard structural shoreline stabilization shall be limited to one cubic yard per lineal foot of stabilization. Any filling in excess of this amount shall be considered a regulated activity subject to the regulations in this SMP pertaining to fill activities.

5. The following regulations apply to the use of riprap:

   a. Riprap material shall consist of clean quarried rock, free of loose dirt and any pollutants, and shall be of sufficient size and weight to prevent movement by river action;

   b. Use of downed logs, snags, or rock to enhance habitat and to provide a more natural appearance to the shoreline shall be incorporated into the design; the logs may be anchored to the shoreland to reduce the possibility of unplanned transport; and

   c. Where on-site environmental conditions allow, vegetation shall be incorporated into the riprap design to reduce erosion, provide cover, shade and habitat and improve the natural appearance of the shoreline, consistent with the applicable vegetation management provisions of this master program.

6. Because of their limited durability and the potential hazard to shore users and the shoreline environment, gabions (wire mesh filled with concrete or rocks) shall not be used where alternatives more consistent with this program are feasible.

7. All structures should include fish habitat elements.

6.19.4. Environments

A. Shoreline stabilization is a permitted use in the **special use environment**, subject to the policies and regulations of this SMP.

B. Shoreline stabilization conditional use in the **urban conservancy**, **natural**, and **aquatic environments**, subject to the policies and regulations of this SMP.

6.20 Signs

6.20.1 Applicability

A sign is any communication device, structure, or fixture that is intended to aid an establishment in identification and to advertise and/or promote a business, service, activity, or interest. A sign shall not be considered to be a building or structural design, but shall be restricted solely to graphics, symbols, or written copy used for any identification, promotional, or advertising purpose.

6.20.2 Policies

A. Signs should be designed and placed so that they are compatible with the aesthetic quality of the existing shoreline and adjacent land and water uses.

B. Signs should not block or otherwise interfere with visual access to the water or shorelands.

6.20.3 Regulations

A. All signs shall avoid interference with habitat, vistas, viewpoints, and physical or visual access to the shoreline.

B. The following types of signs are prohibited in the shoreline jurisdiction:

1. Animated or moving signs (rotating, flashing, blinking, chasing or scintillating) either mechanically, by illumination or by electronics;

2. Displays or banners, clusters of flags, posters, pennants, ribbons, streamers, spinners, twirlers or propellers, balloons, searchlights, portable signs, bubble machines and similar devices of a carnival nature or containing elements creating sound or smell;

3. Signs placed on trees or other natural features; and

4. Internally or externally illuminated signs.

6.20.4. Environments

A. Sign placement is a permitted use in the **special use, urban conservancy,** and **natural environments**, subject to the policies and regulations of this SMP.

B. Sign placement is a conditional use in the **aquatic environment**, subject to the policies and regulations of this SMP.

6.21 Transportation and Parking

6.21.1 Applicability

Transportation facilities are those structures and developments that aid in the movement of people, goods, and services. Such facilities include roads, bridges, and trails, among others.

Parking is the temporary storage of automobiles or other motorized vehicles.

Please see the definition of "transportation facilities" and "parking" in Chapter 2 of this SMP and SMP 6.16 for more information on trails.

6.21.2 Policies

General Policies

A. Where other options are available and feasible, new transportation and parking facilities (including new roads or road expansions, but excluding trail facilities) should not be built within shoreline jurisdiction.

B. New transportation and parking facilities in shoreline jurisdiction should be allowed only when necessary to support allowed shoreline development.

C. Proposed transportation and parking facilities should be planned, located, and designed where routes:

   1. Will have the least possible adverse effect on shoreline features;

   2. Will not result in a net loss of shoreline ecological functions; or

   3. Will not interfere with existing or planned water-dependent uses.

D. When transportation and parking facilities must be located along shorelines, they should be planned, located, and designed to minimize:

   1. The amount of land consumed;

   2. The need for shoreline protection measures;

   3. Modifications to natural drainage systems; and

   4. Alterations to the existing topography.

Transportation Policies

E. Roads should not run parallel to shorelines.

F. Joint use of transportation facilities for multiple purposes, such as utility collocation, should be encouraged.

G. Trails, including the Foothills Trail, should be encouraged along shorelines where they are compatible with the natural character, resources, and ecology of the shoreline.

H. Abandoned or unused transportation corridors that offer opportunities for public access to the water should be acquired and/or retained for such use.

Parking Policies

I. Where possible, parking should serve more than one use.

J. Parking should be designed to incorporate low-impact development practices, such as pervious surfaces.

K. Safe pedestrian access from parking lots to shoreline uses should be provided.

L. Parking should not be allowed as a primary use.

6.21.3 Regulations

General Regulations

A. New roads and parking facilities are allowed in association with authorized shoreline uses that are located in shoreline jurisdiction, unless the new road or parking facility is proven infeasible. When allowed, new roads and parking facilities shall be located as far landward as possible.

   1. Vehicle and pedestrian circulation systems shall be designed to minimize clearing, grading, and alteration of topography and natural features, especially natural drainage patterns and springs.

   2. Road alignment shall follow the natural contours of the site and minimize road or trail width to the greatest extent feasible while meeting applicable government standards.

B. Transportation and parking facilities shall avoid critical areas and their buffers.

C. When transportation and parking facilities must be located along shorelines, they shall be planned, located, and designed to minimize:

   1. The amount of land consumed;

   2. Modifications to natural drainage systems; and

   3. Alterations to the existing topography.

D. All transportation and parking facilities shall be designed, constructed, and maintained to contain and control all debris, overburden, runoff, erosion and sediment generated from the affected areas.

E. Transportation and parking facility planning shall include systems for pedestrian, bicycle, and public transportation.

F. Vacated streets abutting the shoreline shall be maintained as public access points when feasible.

G. Fill for transportation and parking facility development is prohibited in water bodies, associated wetlands and their buffers. Fill may be allowed as a conditional use in support of a state highway crossing below the OHWM, when it is demonstrated to be necessary and the impact is mitigated in accordance with section 5.7.3 of this SMP.

    1. New transportation and parking facilities shall be located or constructed in such a way that shoreline protection measures likely will be unneeded.

Transportation Regulations

H. Transportation facilities shall use existing transportation corridors whenever possible, provided that facility additions and/or modifications will not adversely impact shoreline resources and are otherwise consistent with this program.

I. Transportation and primary utility facilities shall make joint use of rights-of-way and consolidate crossing water bodies to reduce adverse impacts to the shoreline.

J. Transportation facilities shall minimize the need to route surface waters through culverts.

    1. Culverts and similar devices encountered by fish shall not impede fish-passage or hydrology.

K. Transportation facilities allowed to cross over water bodies and/or wetlands shall use elevated, open pile or pier structures. Waterway crossings shall be designed to provide minimal disturbance to banks. New bridge abutments and necessary approach fills shall be located landward of the OHWM and any wetlands.

L. The City shall give preference to mechanical means rather than the use of herbicides for roadside brush control on City roads in shoreline jurisdiction.

    1. Herbicide use shall follow the provisions in Section 5.5, Vegetation Conservation and Section 5.6, Water Quality, Stormwater and Nonpoint Pollution.

M. Transportation facilities shall not be located over water with the exception of bridges that are part of a public road system and/or for pedestrian trails.

Parking Regulations

N. Parking in shoreline jurisdiction is allowed only to support an authorized use.

O. Parking that does not require a shoreline location to carry out its functions shall be located outside of shoreline jurisdiction.

P. Parking facilities for shoreline activities shall provide safe and convenient pedestrian circulation within the parking area and to the shorelines.

Q. Parking facilities shall provide adequate measures to prevent surface water runoff from contaminating water bodies, using best available technologies, and include a maintenance program that will assure proper functioning of such facilities over time.

R. Parking facilities shall be designed and landscaped to minimize adverse impacts on adjacent shoreline and abutting properties.

S. Parking lot landscaping shall consist of native vegetation and be planted before completion of the parking area in such a manner that plantings provide effective screening within three years of project completion.

T. Parking as a primary use is prohibited within shoreline jurisdiction.

6.21.4. Environments

A. New road construction is a conditional use in the **special use** and **urban conservancy environments**, subject to the policies and regulations of this SMP.

B. Except for pedestrian bridges and highway bridges for public uses, road construction is prohibited in the **aquatic environment**.

C. Except for a demonstrated need to expand the highway, road construction is a prohibited use in the **natural environment**.

D. Parking as a primary use is prohibited in **all environments**.

E. Parking as an accessory use is a permitted use in the **special use** and **urban conservancy environments**, subject to the policies and regulations of this SMP.

F. Parking as an accessory use is conditional use in the **natural environment**, subject to the policies and regulations of this SMP.

G. Parking as an accessory use is prohibited in the **aquatic environment**.

6.22 Utilities (primary)

6.22.1 Applicability

Utilities provisions apply to services and facilities that produce, convey, store, or process power, gas, sewage, communications, oil, waste, and the like. On-site utility features serving a primary use, such as water, sewer or gas lines to a residence, are accessory utilities. Please see Chapter 2 for definitions of utilities and accessory utilities.

6.22.2 Policies

A. Utility facilities and corridors should preserve the natural landscape and minimize conflicts with present and planned land uses.

B. Utility facilities and corridors should protect scenic views.

C. Utility corridors should be placed underground to avoid aesthetic impacts to the shoreline.

D. Placement of utilities in existing rights-of-way is encouraged; whenever feasible, utilities should be placed in existing transportation corridors, rights-of-way, or easements to minimize adverse impacts to the shoreline.

E. Facility maintenance that disrupts shoreline ecological functions should be discouraged.

F. All utility facilities should assure no net loss of shoreline ecological functions.

6.22.3 Regulations

A. Non-water oriented utility production and processing facilities, such as power plants and sewage treatment plants, or parts of those facilities that are non-water-oriented, shall not be allowed in shoreline areas unless it can be demonstrated that no other feasible option is available.

B. Transmission facilities for the conveyance of services, such as power lines, cables, and pipelines, shall be located outside of shoreline jurisdiction where feasible.

C. Transmission and distribution facilities, if allowed, shall cross areas of shoreline jurisdiction by the shortest, most direct route feasible, unless such a route would cause significant environmental damage.

D. Where major facilities must be placed in shoreline jurisdiction, the location and design shall be chosen so as not to destroy or obstruct scenic views.

E. New utility lines including electricity, communications, and fuel lines shall be located underground, except where infeasible.

F. Utility lines shall use existing rights-of-way, corridors, and/or bridge crossings whenever possible.

G. Utility development shall, through coordination with the City and other entities, provide for compatible, multiple uses of sites and rights-of-way. Multiple uses might include shoreline public access points, trail systems, or other uses, provided that such uses will not unduly interfere with utility operations, endanger public health and safety, or create a significant and disproportionate liability for the owner.

H. All utility system projects and maintenance shall be designed, located, and installed in a manner that results in no-net-loss of ecological function.

I. All new pipelines not exempt under WAC 173-27-040, transporting liquids intrinsically harmful to aquatic life or potentially injurious to water quality, require a conditional use permit. All project applications for said pipelines must convincingly demonstrate that the pipeline includes adequate measures to prevent impacts to aquatic life and water quality, including automatic shut-off valves on both sides of the water body.

J. Utilities that demonstrate the need for shoreline placement may exceed the height limitations in Table 6.2.

6.22.4. Environments

A. The following uses are prohibited in **all environments**:

1. Solid waste disposal facilities;

2. Telecommunications facilities, except that such facilities shall be authorized to the extent mandated by state and federal law; and

3. New wastewater treatment plants.

B. Public water supply wells are prohibited in the **special use** and **aquatic environments**.

C. Public water supply wells and associated corridors are permitted in the **urban conservancy** subject to the policies and regulations of this SMP. Public water supply wells are permitted in the **natural environment** west of SR 410 only when it is demonstrated that the placement of such a well is not feasible in the **urban conservancy environment**, subject to the policies and regulations of this SMP.

D. Sewage, gas, electricity and other utility lines not mentioned in SMP 6.22.4.A and B as prohibited are conditional uses in the **aquatic environment** (i.e. in the water), but any utility may be permitted above the **aquatic environment** as an ancillary structure to a bridge, for example, or may be bored under the river.

E. Sewage, gas, electricity and other utility lines not mentioned in SMP 6.22.4.A and B as prohibited are permitted in the **special use environment**, subject to the policies and regulations of this SMP.

F. Sewage, gas, electricity and other utility lines not mentioned in SMP 6.22.4.A and B as prohibited are conditional uses in the **urban conservancy** and **natural environments**, subject to the policies and regulations of this SMP.

6.23 Utilities (accessory)

6.23.1 Applicability,

Accessory utilities are on-site utility features serving a primary use, such as a power or water line. Accessory utilities do not carry significant capacity to serve other users and are considered a part of the primary use. They are addressed in this section because they

concern many types of development and have the potential to impact the quality of the shoreline and its waters.

Please see the definition of "utilities, accessory" in Chapter 2 of this SMP.

6.23.2 Policies

A. Accessory utilities are necessary to serve shoreline uses and should be properly installed to protect the shoreline and its waters from contamination and degradation to ensure no net loss of ecological functions.

B. Accessory utility facilities and access ways should be located outside shoreline jurisdiction. When infeasible to place outside the shoreline jurisdiction, the following policies should be followed:

1. Utilities should be placed underground.

2. Shoreline views should not be affected; above-ground utilities should be screened with native vegetation.

3. Revegetation should be in accordance with SMP 5.5.

4. Pollutants should be avoided.

C. Accessory utility facilities should preserve the natural landscape and shoreline ecological processes and functions and minimize conflicts with present and planned land uses.

6.23.3 Regulations

A. In shoreline areas, accessory utility transmission lines, pipelines and cables shall be placed underground.

1. Accessory utility transmission lines, pipelines and cables shall be placed in existing rights-of-way, driveways, corridors and/or bridge crossings whenever possible.

2. Proposals for new corridors in shoreline areas involving water crossings must demonstrate the need for a shoreline location.

3. Accessory utilities shall be placed landward from above-ground structures.

B. Through coordination with government agencies, accessory utility development shall provide for compatible multiple use of sites and rights-of-ways.

1. Such uses include shoreline access points, trails, and other forms of recreation and transportation systems, provided such uses will not unduly interfere with utility operations or endanger public health and safety.

C. Sites disturbed for accessory utility installation shall be stabilized during and following construction to avoid adverse impacts from erosion.

1. See vegetation conservation section SMP 5.5.

D. Utility discharges and outfalls shall be located, designed, constructed, and operated in accordance with best management practices to ensure water quality is maintained.

E. Utilities that need water crossings shall be placed deep enough to avoid the need for bank stabilization and stream/riverbed filling both during construction and in the future because of flooding and bank erosion that may occur over time.

1. Utility water crossings shall be installed using boring (as opposed to open trenching) unless infeasible.

6.23.4. Environments

A. Accessory utilities are permitted in **all environments**, subject to the policies and regulations of this SMP.

7 ADMINISTRATIVE AND NONCONFORMITY PROVISIONS

7.1 Purpose and Applicability

The purpose of this chapter is to establish an administrative system design to assign responsibilities for SMP implementation and to outline the process of review for shoreline proposals and applications.

All proposed uses and development occurring within shoreline jurisdiction must conform to chapter RCW 90.58, the Shoreline Management Act, and this master program.

If inconsistencies or conflicts with other administrative sections of the City's municipal code occur, this chapter shall prevail.

7.2 Permits

In 1971, the Washington State Legislature passed into law the Shoreline Management Act (SMA), which regulates the uses and management of Washington's shorelines. Local government is given the primary responsibility for administrating the Act through the City's Shoreline Management Program (SMP). The White River is the only waterbody presently under the jurisdiction of the City of Buckley that is covered by the Act. Shoreline jurisdiction in the City includes any portions of properties located in:

A. All areas waterward of the ordinary high water mark (OHWM);

B. All landward areas within 200 feet of the OHWM;

C. All landward areas 200 feet from a floodway; and

D. All associated wetlands.

Please see Section 4.1, Shoreline Jurisdiction, for a more detailed discussion of the City's shoreline jurisdiction.

The SMP requires review of any development within shoreline jurisdiction. These reviews are divided into four basic approvals: a Letter of Exemption (SSDE), a Shoreline Substantial Development Permit (SSDP), a Shoreline Variance (SVAR), and a Shoreline Conditional Use Permit (SCUP).

7.2.1 General Permit Information

All shoreline permits require a fee. All aspects of development are to be disclosed in the shoreline permit application.

Shoreline exemptions (SSDE) and shoreline substantial development (SSDP) permits are issued after review by the City. SSDPs are sent to the Attorney General's Office (AGO) and the State Department of Ecology (DOE). The DOE reviews the requests, determines

whether the submittal is complete according to state laws, reviews the requests against the city's SMP, and files the city's final decision. A Notice of Filing is sent to the applicant and city. Appeals may be filed within 21 days from the date of filing.

SVARs and SCUPs follow a similar process, but instead of the state merely reviewing the city's decision, it has the responsibility to also approve or disapprove the permit.

Information common to all shoreline permit applications includes the following:

A. Applicants shall apply for permission to use or develop shorelines on forms provided by the City. Additional submittal requirements are given for state review in WAC 173-27-180.

B. SSDPs are administrative applications with decisions given by the shoreline administrator. SCUPs and SVARs require public hearings with the city's Hearing Examiner, which renders the city's decisions.

1. Special procedures for WSDOT projects.

a. Permit review time for projects on a state highway. Pursuant to RCW 47.01.485, the Legislature established a target of 90 days review time for local governments.

b. Optional process allowing construction to commence twenty-one days after date of filing. Pursuant to RCW 90.58.140, Washington State Department of Transportation projects that address significant public safety risks may begin twenty-one days after the date of filing if all components of the project will achieve no net loss of shoreline ecological functions.

C. Submittal Requirements.

For all shoreline applications, all items listed in the applications are minimum requirements. For various development permits, additional items are required, as follows:

1. Applicants shall demonstrate that reasonable efforts were examined with the intent to minimize impacts to the shoreline jurisdiction. Mitigation plans shall be submitted for all proposed impacts.

2. Clearing and Grading (SMP Section 5.5)

See Vegetation Conservation below.

3. Dredging (SMP Section 6.9)

In addition to the information required for a Shoreline Conditional Use Permit application, the following information shall be required for all dredging applications:

a. A description of the purpose of the proposed dredging and an analysis of compliance with the policies and regulations of this SMP.

b. An analysis of the existing shoreline and potential adverse impacts, including the following:

   i. A site plan map outlining the perimeter of the proposed dredge area. The map must also include the existing bathymetry and have data points at a minimum of two-foot depth increments. Topographical references are to be in NAVD 1929 until such time as the FEMA maps are updated, and the vertical datum is in 1988 terms;

   ii. A detailed description of the existing physical character, shoreline geomorphology, and biological resources provided by the area proposed to be dredged. This description should include information on the stability of bedlands adjacent to proposed dredging and spoils disposal areas;

   iii. A detailed description of potential adverse impacts to ecological functions and processes; and

   iv. A mitigation plan to address any identified adverse impacts to ecological functions or processes.

c. A detailed description of the physical, chemical, and biological characteristics of the dredge materials to be removed, including:

   i. Physical analysis of material to be dredged (material composition and amount, grain size, organic materials present, source of material, etc);

   ii. Chemical analysis of material to be dredged (volatile solids, chemical oxygen demand, grease and oil content, mercury, lead and zinc content, etc); and

   iii. Biological analysis of material to be dredged.

d. A description of the method of materials removal, including facilities for settlement and movement.

e. Dredging procedure, including the estimated length of time it will take to complete dredging, method of dredging, and amount of materials removed.

f. Frequency and quantity of project maintenance dredging.

g. Detailed plans for dredge spoil disposal, including specific land disposal sites and relevant information on the disposal site, including but not limited to:

   i. Dredge material disposal area;

   ii. Physical characteristics including location, topography, existing drainage patterns, surface and ground water;

iii. Size and capacity of disposal site;

iv. Means of transportation to the disposal site;

v. Proposed dewatering and stabilization of dredged material;

vi. Methods of controlling erosion and sedimentation; and

vii. Future use of the site and conformance with land use policies and regulations.

h. Plan for disposal of maintenance spoils for at least a 50-year period, if applicable.

i. Hydraulic modeling studies sufficient to identify existing geohydraulic patterns and probable effects of dredging.

4. Environmental Impacts (SMP Section 5.7)

a. For all projects, the applicant shall provide, in addition to the standard permit information requirements contained in WAC 173-27, a report prepared by a qualified professional describing existing conditions/ecological functions and anticipated shoreline environmental impacts (if any). Note that if a critical areas report must also be prepared pursuant to Appendix B, the shoreline and critical areas reports may be submitted as a single report. The report shall demonstrate and conclude that the project will result in no net loss of ecological function.

b. If shoreline environmental impacts are identified, the applicant shall develop and implement a mitigation plan prepared by a qualified professional consistent with the requirements of the critical areas regulations in Appendix B.

i. The mitigation plan shall demonstrate that all reasonable efforts were taken to mitigate potential adverse impacts to ecological function resulting from new development and redevelopment in shorelines in the mitigation sequencing. Lower priority measures shall be applied only where higher priority measures are determined to be infeasible or inapplicable.

(A) Avoid the impact altogether by not taking a certain action or parts of an action.

(B) Minimize impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts.

(C) Rectify the impact by repairing, rehabilitating, or restoring the affected environment.

(D) Reduce or eliminate the impact over time by preservation and maintenance operations.

(E) Compensate for the impact by replacing, enhancing, or providing substitute resources or **environments**.

(F) Monitor the required compensation and take remedial or corrective measures when necessary.

ii. When compensatory mitigating measures are appropriate pursuant to the mitigation sequencing parts (2) through (5), preferential consideration shall be given to measures that replace the impacted functions directly and in the immediate vicinity of the impact.

(A) Alternative compensatory mitigation within the watershed that addresses limiting factors or identified critical needs for shoreline resource conservation based on watershed or comprehensive resource management plans applicable to the area of impact may be authorized.

(B) Performance and maintenance bonds may be required for the following:

(1) To ensure required mitigation measures provide no net loss of ecological functions; and

(2) To ensure the proposal meets all conditions of approval.

iii. The mitigation plan shall achieve no net loss of ecological functions.

5. Fill. (SMP Section 6.10)

In addition to shoreline permit application requirements, applications for fill shall include the following:

a. Proposed use of the fill area;

b. Physical, chemical, and biological characteristics of the fill material;

c. Source of fill material;

d. Method of placement and compaction;

e. Location of fill relative to natural and/or existing drainage patterns and wetlands;

f. Location of the fill perimeter relative to the OHWM;

g. Perimeter erosion control or stabilization means; and

h. Type of surfacing and runoff control devices.

6. Floods (SMP 5.3)

In addition to shoreline permit application requirements, applications for development in the flood plain shall include the following:

a. Existing shoreline stabilization and flood protection works within the area;

b. Physical, geological and soil characteristics of the area;

c. Biological resources and predicted impact to fish, vegetation and animal habitat associated with shoreline ecological systems;

d. Predicted impact on area shore and hydraulic processes, adjacent properties and shoreline and water uses; and

e. Analysis of alternative flood protection measures both structural and nonstructural.

7. In-water work. (SMP Section 6.13)

a. Applications shall include a copy of the JARPA application submitted to state and/or federal agencies and a list of to whom the JARPA was sent.

b. Applicants shall state that the project will comply with timing restrictions as set forth by state and federal project approvals.

8. Shoreline stabilization permits. (SMP Section 6.19)

In addition to submitting an application for the appropriate shoreline permit, the applicant shall submit the following as part of a request to construct a new, enlarged, or replacement shoreline stabilization measure:

a. A geotechnical report prepared by a qualified professional with an engineering degree. The report shall include the following:

i. An assessment of the need for structural shoreline stabilization;

ii. An estimate of time frames and rates of erosion;

iii. A report on the urgency associated with the specific situation;

(A) New hard structural shoreline stabilization measures shall not be authorized, except when a report confirms that that an existing structure likely will be damaged within three years as a result of shoreline erosion and that in the absence of such hard structural shoreline stabilization measures, or where waiting until the need is immediate likely will result in the loss of opportunity to use measures that would avoid impacts on ecological functions.

(B) Where the geotechnical report confirms a need to prevent potential damage to a primary structure, but the need is not as immediate as three years, the report may still be used to permit using soft measures.

iv. An assessment of the cause of erosion, looking at processes occurring both waterward and landward of the OHWM;

v. An assessment of alternative measures to shoreline stabilization, including:

(A) Placing the development farther from the OHWM;

(B) Correcting any on-site groundwater or drainage issues that may be causing shoreline erosion; and/or

(C) Placing of "log jam" structures in the channel to pull the erosive force away from the eroding bank.

vi. Where structural shoreline stabilization is determined to be necessary, the assessment must evaluate the feasibility of using soft shoreline stabilization measures in lieu of hard structural shoreline stabilization measures. Soft shoreline stabilization may include the use of gravels, cobbles, boulders, and logs, as well as vegetation; and

vii. Design recommendations for minimum sizing of hard structural or soft structural shoreline stabilization materials, including gravel and cobble beach substrates necessary to dissipate river energy, eliminate scour, and provide long-term shoreline stability.

b. For replacements of existing hard structural shoreline stabilization measures with a similar measure, the applicant shall submit a written narrative providing a demonstration of need. The narrative must be prepared by a qualified professional. The demonstration of need shall consist of the following:

i. An assessment of the necessity for continued structural shoreline stabilization, considering site-specific conditions such as water depth, orientation of the shoreline, flow velocities, and location of the nearest primary structure;

ii. An assessment of erosion potential resulting from natural processes operating at or waterward of the OHWM in the absence of the hard structural shoreline stabilization;

iii. An assessment of alternative measures to shoreline stabilization, including:

(A) Relocating the development farther from the OHWM; and

(B) Correcting any on-site groundwater or drainage issues that may be causing shoreline erosion.

iv. An assessment of the feasibility of using soft shoreline stabilization measures in lieu of hard structural shoreline stabilization measures. Soft structural shoreline stabilization may include the use of gravels, cobbles, boulders, and logs, as well as vegetation; and

v. Design recommendations for minimizing impacts of any necessary hard structural shoreline stabilization.

c. A demonstration of need is not required when an existing hard structural shoreline stabilization measure is to be repaired.

i. A demonstration of need is required when an existing hard stabilization measure is to be replaced.

ii. Soft measures can be waterward of the OHWM.

d. For all structural shoreline stabilization measures, including soft structural shoreline stabilization, detailed construction plans are required, including, but not limited to, the following:

i. Plan and cross-section views of the existing and proposed shoreline configuration, showing accurate existing and proposed topography and OHWMs;

ii. Detailed construction sequence and specifications for all materials, including gravels, cobbles, boulders, logs, and vegetation. The sizing and placement of all materials shall be selected to accomplish the following objectives:

(A) Protect the primary structures from erosion and other damage over the long term, and accommodate the normal amount of alteration from ecological processes; and

(B) Allow safe passage and migration of fish and wildlife.

iii. For projects that include native vegetation, a detailed five-year vegetation maintenance and monitoring program shall include the following:

(A) Goals and objectives of the shoreline stabilization plan;

(B) Success criteria by which the implemented plan will be assessed;

(C) A five year maintenance and monitoring plan, consisting of at least one site visit per year by a qualified professional, with annual progress reports submitted to the shoreline administrator; and

(D) A contingency plan in case of failure.

e. All soft structural shoreline stabilization projects shall include a program for monitoring and maintenance.

9. Utilities, Primary. (SMP Section 6.22)

In addition to permit application criteria, applications for installation of utility facilities in shoreline areas shall include the following:

a. Description of the proposed facilities;

b. Reasons(s) why the utility facility requires a shoreline location;

c. Alternative locations considered and reasons for their elimination;

d. Location of other utility facilities in the vicinity of the proposed project and any plans to include the facilities of other types of utilities in the project;

e. Plans for reclamation of areas disturbed both during construction and following decommissioning and/or completion of the primary utility's useful life;

f. Plans for control of erosion and turbidity during construction and operation; and

g. An analysis of the potential for locating the proposed facility at another existing utility facility site or within an existing utility right-of-way.

10. Vegetation Cnservation (SMP Section 5.5.3)

a. The City shall require and use the following information, in addition to the standard permit information requirements contained in WAC 173-27-180, in its review of all requests for vegetation removal:

i. Proposed timing of all construction phases of the project;

ii. Existing soil types, bank materials, and analysis of slope stability;

iii. Proposed materials that will be used on-site including:

A. Rock size, shape, and quantity;

B. Plant materials;

C. Soil preparations that provide optimal planting mediums for the vegetation proposed;

D. Areas to be seeded; and

E. Fencing;

iv. Existing and proposed slope profiles, including location of OHWM;

v. Design of transition areas between bioengineering site and adjacent properties; and

vi. Documentation (including photos) of existing preconstruction shoreline characteristics.

b. When clearing and/or grading is proposed, the application shall contain the following:

i. Existing vegetation to be removed and new vegetation to be planted to restore its function;

ii. An analysis how no net loss of vegetative habitat function will be achieved;

iii. A greater amount of new plantings to compensate for permanent development plans;

iv. Method of removal, soil amendment, plantings, and maintenance; and

v. Suggested amounts for performance and maintenance bonds.

D. Public Notice.

A notice of application shall be issued for all shoreline permit applications and provide specifically that the comment period for the notice of application for a shoreline permit shall be not less than 30 days, in accordance with WAC 173-27-110(2)(e).

E. Application Review.

The shoreline administrator shall make decisions on applications for SSDPs, and recommendations on applications for SCUPs and SVARs based on the following. (Also see SMP 7.2.2 and 3.):

1. The policies and procedures of the Shoreline Management Act and related sections of the Washington Administrative Code; and

2. The City's SMP.

F. Hearing Examiner.

The Hearing Examiner shall review an application for SVARs and SCUPs and make decisions based on the following (Also see SMP 7.2.4 and 5):

1. This SMP;

2. The policies and procedures of the Shoreline Management Act and related sections of the Washington Administrative Code, including WAC 173-27-140 and 150;

3. Written and oral comments from interested persons; and

4. Reports from the shoreline administrator.

G. Filing with Department of Ecology and Attorney General's Office.

All final shoreline permit decisions are filed with Ecology and the AGO when the local appeal period is completed.

Along with the city's decision on a SSDP, SCUP, or SVAR, a complete application as defined in WAC 173-27-180 and a transmittal letter shall be filed.

H. Hold on Construction.

Each permit issued by the City shall contain a provision that construction pursuant to the permit shall not begin and is not authorized during the 21-day appeal period, which is considered from the date of filing with the Department of Ecology, per WAC 173-27-190 or as subsequently amended.

I. Duration of Permits.

Construction, use, or activity shall commence within two years after approval of the permits. Authorization to conduct development activities shall terminate within five years after the effective date of a shoreline permit. The shoreline administrator may authorize a single extension before the end of either of these time periods, with prior notice to parties of record and the Department of Ecology, for up to one year based on reasonable factors.

J. Compliance With Permit Conditions.

When permit approval includes conditions, such conditions shall be satisfied prior to occupancy or use of a structure or prior to commencement of a nonstructural activity unless the conditions are intended to continue to apply after occupancy.

7.2.2 Exemptions, Exceptions, and Exclusions.

Almost all development within the shoreline is subject to the requirements of the SMA and this SMP, regardless of whether a substantial development permit is required.

Three distinct categories of actions that don't require a Shoreline substantial development permit (SSDP) require different levels of review under the SMA:

A. Exemption. The shoreline exemption is a written statement that identifies the proposal and states the proposal meets the exemption levels of the SMA and meets the minimum requirements of the SMA and the SMP. A shoreline exemption may need SEPA, and federal or state approvals. An exemption may have conditions placed on it to bring the proposal into full compliance with the SMP. Shoreline exemptions are decided administratively by the planning director. It is governed under WAC-173-27-040, and the exemptions are listed in the definition of "shoreline substantial development" as not meeting that definition. They are as follows:

1. Normal maintenance or repair of existing structures or developments, including damage by accident, fire, or elements;

2. Construction of the normal protective bulkhead common to single-family residences;

3. Emergency construction necessary to protect property from damage by the elements;

4. Construction and practices normal or necessary for farming, irrigation, and ranching activities, including agricultural service roads and utilities on shorelands, and the construction and maintenance of irrigation structures including but not limited to head gates, pumping facilities, and irrigation channels. A feedlot of any size, all processing plants, other activities of a commercial nature, alteration of the contour of the shorelands by leveling or filling other than that which results from normal cultivation, shall not be considered normal or necessary farming or ranching activities. A feedlot shall be an enclosure or facility used or capable of being used for feeding livestock hay, grain, silage, or other livestock feed, but shall not include land for growing crops or vegetation for livestock feeding and/or grazing, nor shall it include normal livestock wintering operations;

5. Construction or modification of navigational aids such as channel markers and anchor buoys;

6. Construction on shorelands by an owner, lessee, or contract purchaser of a single-family residence for his own use or for the use of his or her family, which residence does not exceed a height of thirty-five feet above average grade level and which meets all requirements of the state agency or local government having jurisdiction thereof, other than requirements imposed pursuant to this chapter;

7. Construction of a dock, including a community dock, designed for pleasure craft only, for the private noncommercial use of the owner, lessee, or contract purchaser of single and multiple-family residences. This exception applies if either:

    a. In salt waters, the fair market value of the dock does not exceed two thousand five hundred dollars; or

    b. In freshwaters, the fair market value of the dock does not exceed the amounts shown in RCW 98.58.030(3)(3) for docks that are constructed to replace existing dock. However, if subsequent construction occurs within five years of completion of the prior construction, and the combined fair market value of the subsequent and prior construction exceeds the amount specified above, the subsequent construction shall be considered a substantial development for the purpose of this chapter, but if subsequent construction having a fair market value exceeding the above-mentioned amount occurs within five years of completion of the prior construction, the subsequent construction shall be considered a substantial development;

8. Operation, maintenance, or construction of canals, waterways, drains, reservoirs, or other facilities that now exist or are hereafter created or developed as a part of an irrigation system for the primary purpose of making use of system waters, including return flow and artificially stored groundwater for the irrigation of lands;

9. The marking of property lines or corners on state owned lands, when such marking does not significantly interfere with normal public use of the surface of the water;

10. Operation and maintenance of any system of dikes, ditches, drains, or other facilities existing on September 8, 1975, which were created, developed, or utilized primarily as a part of an agricultural drainage or diking system;

11. Site exploration and investigation activities that are prerequisite to preparation of an application for development authorization under this chapter, if:

    a. The activity does not interfere with the normal public use of the surface waters;

    b. The activity will have no significant adverse impact on the environment including, but not limited to, fish, wildlife, fish or wildlife habitat, water quality, and aesthetic values;

    c. The activity does not involve the installation of a structure, and upon completion of the activity the vegetation and land configuration of the site are restored to conditions existing before the activity;

    d. A private entity seeking development authorization under this section first posts a performance bond or provides other evidence of financial responsibility to the local jurisdiction to ensure that the site is restored to preexisting conditions; and

    e. The activity is not subject to the permit requirements of RCW 90.58.550;

12. The process of removing or controlling an aquatic noxious weed, as defined in RCW 17.26.020, through the use of an herbicide or other treatment methods applicable to weed control that are recommended by a final environmental impact statement published by the Department of Agriculture or the department jointly with other state agencies under chapter 43.21C RCW.

13. A forest practice that only involves timber cutting is not a development under the act and does not require a shoreline substantial development permit or a shoreline exemption. A forest practice that includes activities other than timber cutting may be a development under the act and may require a substantial development permit, as required by WAC 222-50-020.

14. The external or internal retrofitting of an existing structure with the exclusive purpose of compliance with the Americans with disabilities act of 1990 (42 U.S.C. Sec. 12101 et seq.) or to otherwise provide physical access to the structure by individuals with disabilities.

B. Exception. The second level is called an exception; this requires consistency with the city's SMP and environmental laws, but the city cannot add conditions, it can only provide comments to the applicant and ecology. It is governed under WAC-173-27-044 and are herein adopted by reference, as amended.

C. Exclusion. Development that is not required to obtain a shoreline permit or other review to implement the Shoreline Management Act are listed in WAC 173-26-045 and is herein adopted by reference, as amended. Some of the items that may be used in Buckley include to the following:

1. Pursuant to RCW 90.58.045 regarding environmental excellence program agreements, notwithstanding any other provision of law, any legal requirement under the Shoreline Management Act, including any standard, limitation, rule, or order is superseded and replaced in accordance with the terms and provisions of an environmental excellence program agreement, entered into under chapter 43.21K RCW.

2. Projects authorized through the Energy Facility Site Evaluation Council process, pursuant to chapter 80.50 RCW.

7.2.3 Shoreline Substantial Development Permits

Review Criteria for Shoreline Substantial Development Permits are found in WAC Sections 173-27-140, 150, and 200.

The SSDP is a standard shoreline permit for development that is not exempt costing more than the amounts shown in RCW 98.58.030(3)(e) or for development that interferes with public use of the shoreline. The SSDP is decided by the shoreline administrator and is then sent to the state Department of Ecology and Attorney General's Office. The cost figure is subject to change by the Office of Financial Management every five years.

7.2.4 Shoreline Conditional Use Permits

Review Criteria for Shoreline Conditional Use Permits are found in WAC Sections 173-27-140, 160, 200, and 210.

SCUPs can allow greater flexibility in applying use regulations. In authorizing SCUPs, special conditions may be attached to the permit by the City or the Department of Ecology to prevent undesirable effects of the proposed use.

A. Uses classified or set forth in the Shoreline Master Program as conditional uses may be authorized provided the applicant can demonstrate all of the following:

1. That the proposed use will be consistent with the policies of RCW 90.58.020 and the policies of the master program;

2. That the proposed use will not interfere with the normal public use of public shorelines;

3. That the proposed use of the site and design of the project will be compatible with other permitted uses within the area;

4. That the proposed use will cause no unreasonably adverse· effects to the shoreline environment designation in which it is to be located;

5. That the public interest suffers no substantial detrimental effect; and

6. The proposal complies with all other applicable requirements, criteria and standards of the City.

B. Other uses that aren't classified or set forth in this SMP may be authorized as conditional uses provided the applicant can demonstrate, in addition to the criteria set forth in SMP 7.2.4.A above, that extraordinary circumstances preclude reasonable use of the property in a manner consistent with the use regulations of the master program.

C. Uses that are specifically prohibited by the master program cannot be authorized.

D. In the granting of all conditional use permits, consideration shall be given to the cumulative impact of additional requests for like actions in the area. For example, if conditional use permits were granted for other developments in the area where similar circumstances exist, the total of the conditional uses should also remain consistent with the policies of RCW 90.58.020 and should not produce substantial adverse effects to the shoreline environment.

7.2.5 Shoreline Variances

Review criteria for variance permits are found in WAC Sections 173-27-170 and 200.

The SVAR is used to allow development within shoreline jurisdiction that requires modified dimensional or bulk standards found in this SMP because of unique conditions on the project site. Such conditions might include the lot depth being too shallow to accommodate the proposed structure and prescribed setback. Like the SCUP, the SVAR is decided first by the City Hearing Examiner and then finally by the state.

The purpose of a variance permit is strictly limited to granting relief from specific bulk, dimensional or performance standards set forth in the SMP where extraordinary or unique circumstances exist. These extraordinary or unique circumstances must relate to the property in such a way that the strict implementation of the SMP will impose unnecessary hardships on the applicant or thwart the policies set forth in RCW 90.58.020.

Of the decision criteria listed in WAC 173-27-170, if one criterion cannot be met, the variance must be denied. The criteria are written for both landward and in- or over-water proposals.

Shoreline variances for work within wetlands are not allowed.

These criteria include:

A. Variance permits should be granted in a circumstance where denial of the application would result in a thwarting of the policy enumerated in RCW 90.58.020. In all instances, extraordinary circumstances shall be shown and the public interest shall suffer no substantial detrimental effect. Any permit for a variance must be submitted to the Department of Ecology for approval or disapproval.

B. Except within wetlands, applications for variances where the development authorized by the variance will be located landward of the ordinary high water mark may be approved or approved with conditions or modifications provided the applicant can demonstrate all of the following:

1. That the strict application of the bulk, dimensional or performance standards set forth in this SMP precludes or significantly interferes with a reasonable use of the property not otherwise prohibited by the SMP;

2. That the hardship described in the preceding criterion is specifically related to the property, and is a result of unique conditions such as irregular lot shape, size, or natural features and the application of the SMP, and not, for example, from deed restrictions or the applicant's own actions;

3. That the design of the project is compatible with other allowed activities and uses in the area and will not cause adverse effects to adjacent properties or the shoreline environment;

4. The variance will not constitute a grant of special privilege not enjoyed by the other properties in the area, and is the minimum necessary to afford relief per WAC 173-27-170(2)(e); and

5. The public interest will suffer no substantial detrimental effect.

C. Applications for variances where the development authorized by the variance will be located either waterward of the ordinary high water mark or within wetlands may be approved or approved with conditions or modifications provided the applicant can demonstrate all of the following:

1. That the strict application of the bulk, dimensional or performance standards set forth in this SMP precludes a reasonable use of the property not otherwise prohibited by the SMP;

2. That the proposal is consistent with the criteria established under SMP section 7.2.5 (2) through (5); and

3. That the public rights of navigation and use of the shorelines will not be adversely affected.

D. In the granting of all variances, consideration shall be given to the cumulative impact of additional requests for like actions in the area. For example, if variances were granted for other developments in the area where similar circumstances exist, the total of the

variances shall also remain consistent with the policies of RCW 90.58.020 and shall not produce substantial adverse effects to the shoreline environment.

E. Requests for varying the use to which a shoreline area is to be put are not requests for variances but rather for conditional uses. Such requests shall be evaluated using the criteria set forth in Section 7.2.4, Shoreline Conditional Use Permits.

7.3 Nonconformities.

Nonconforming shoreline development includes structures and uses. A structure could be a fence, building, or bulkhead; a use is what the land or structure is used for, such as commercial, residential, or recreational. Unless specifically called out, the term "nonconforming development" means both structures and uses.

Legal nonconformities shall follow the following standards:

A. ***Nonconforming development.***

1. Nonconforming development may be continued; provided, it is not enlarged, intensified, increased, or altered in any way that increases its nonconformity.

2. A nonconforming development that is moved any distance must be brought into conformance with the Buckley Shoreline Master Program and the Shoreline Management Act.

B. Nonconforming structures.

1. A structure for which a variance was issued shall be considered a legal nonconforming structure and the requirements of this section shall apply as they apply to preexisting nonconformities.

2. If a nonconforming structure is damaged to an extent not exceeding 75 percent replacement cost of the original development, it may be reconstructed to those configurations existing immediately before the structure was damaged, as long as restoration is completed within two years from the date of damage.

C. Nonconforming uses.

1. Uses that were legally established and are nonconforming with regard to the use regulations of the master program may continue as legal nonconforming uses.

2. If a nonconforming use is discontinued for 12 consecutive months or for 12 months during any two-year period, any subsequent use shall be conforming. It shall not be necessary to show that the owner of the property intends to abandon such nonconforming use in order for the nonconforming rights to expire. Water-dependent uses are not considered discontinued if they are inactive because of seasonal dormancy, or where the use includes phased or rotational operations as part of typical operations.

3. A nonconforming use shall not be changed to another nonconforming use, regardless of the conforming or nonconforming status of the building or structure in which it is housed.

D. Nonconforming lots.

1. A nonconforming lot, tract, parcel, site, or division that was established prior to the effective date of the Act or this master program and does not conform to the current lot size or density standards may be developed as long as such development conforms to other requirements of this master program and the Act.

7.4 Enforcement and Penalties

> The legislature finds that the shorelines of the state are among the most valuable and fragile of its natural resources and that there is great concern throughout the state relating to their utilization, protection, restoration, and preservation. In addition, it finds that ever increasing pressures of additional uses are being placed on the shorelines necessitating increased coordination in the management and development of the shorelines of the state. … There is, therefore, a clear and urgent demand for a planned, rational, and concerted effort, jointly performed by federal, state, and local governments, to prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines.
>
> It is the policy of the state to provide for the management of the shorelines of the state by planning for and fostering all reasonable and appropriate uses. This policy is designed to insure the development of these shorelines in a manner which, while allowing for limited reduction of rights of the public in the navigable waters, will promote and enhance the public interest. This policy contemplates protecting against adverse effects to the public health, the land and its vegetation and wildlife, and the waters of the state and their aquatic life, while protecting generally public rights of navigation and corollary rights incidental thereto… RCW 90.58.020.

Writing and implementing a plan is one part of the state's goal. Enforcing the plan is another part. Enforcement can come through establishing conditions of approval to make a proposal meet each criterion listed in the SMP, and it can come through notices of violation and penalty assessment when work is performed without permits or when development doesn't comply with the approved permit.

A. It is a violation of the SMP to initiate or maintain or cause to be initiated or maintained the use of any structure, land or property within the shorelines of the City without first obtaining the permits or authorizations required for the use.

B. It is a violation of the SMP for any person to use, construct, locate, or demolish any structure, lands or property within shorelines of the City in any manner that is not permitted by the terms of any permit or authorization issued through this SMP or in a manner that violates the conditions of approval, provided that the terms or conditions are explicitly stated on the permit or the approved plans.

C. It is a violation of the SMP to remove or deface any sign, notice, or order required by or posted in accordance with this SMP.

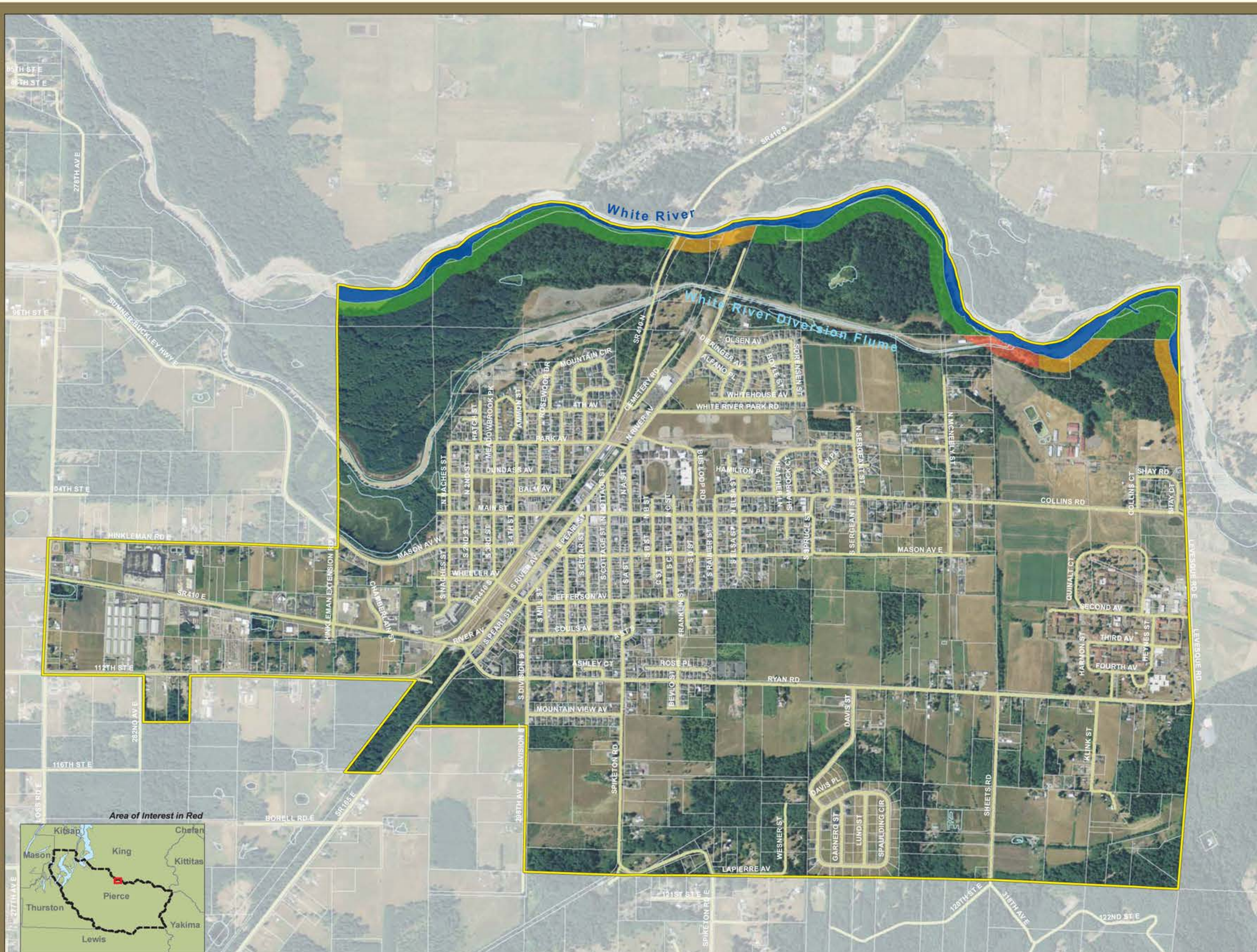
D. It is a violation of this SMP to misrepresent any material fact in any application, plans, or other information submitted to obtain any shoreline use or development authorization.

E. It is a violation of the SMP for anyone to fail to comply with any other requirement of this SMP.

F. Except for emergencies (see WAC 173-27-040(2.d)), for permits requested after development is performed, or for restoration work that is required because a permit was not first requested before the work was done, all associated permit fees shall be triple that which is ordinarily charged (hourly charge fees shall also be triple and include maintenance oversight).

G. Violations of the SMP are subject to the enforcement provisions and as authorized by WAC 173-27-240. The City Attorney may also employ the enforcement procedures authorized by WAC 173-27-240 through 173-27-300 and RCW 90.58.220 to enforce compliance with the SMP.

ENVIRONMENT DESIGNATIONS



CITY OF BUCKLEY
Shoreline Master Program

0 750 1,500
Feet

MAP LEGEND

Environment Designation

- Natural
- Special Use
- Urban Conservancy
- Aquatic
- Parcels
- Other Waterbodies
- Roads
- City Boundary

NOTE: Associated wetlands are not shown on this map but shall be regulated under the Shoreline Master Program.

THE WATERSHED COMPANY

June 11, 2012
Data: Pierce County, City of Buckley, The Watershed Company.

Shoreline jurisdiction boundaries depicted on this map are approximate. They have not been formally delineated or surveyed and are intended for planning purposes only. Additional site-specific evaluation may be needed to confirm/verify information shown on this map.

2019 AMENDMENT
ADOPTED NOVEMBER 25, 2019
ORD. 23-19

CITY OF BUCKLEY
GRANT NO. **Grant No. SEASMP-1719-BUCKLE-00006**

APPENDIX B

SHORELINE CRITICAL AREA REGULATIONS

for Shorelines in the City of Buckley: White River

City of Buckley
Building and Planning Division
P.O. Box 1960
Buckley, WA 98321

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Contents:

Appendix Section B.1
CRITICAL AREAS – GENERAL PROVISIONS
Subsections:

B.1.1 Purpose.

A. The purpose of this SMP Appendix is to designate and classify ecologically sensitive and hazardous areas, and to protect these areas and their functions and values while also allowing for reasonable use of private property.
B. The regulations of the SMP and this SMP Appendix are intended to protect critical areas in accordance with the Growth Management Act, the Shoreline Management Act, and through the application of best available science, as determined according to WAC 365-195-900 through 365-195-925, and in consultation with state and federal agencies and other qualified professionals. This SMP Appendix also is to implement the goals, policies, guidelines, and requirements of the aforementioned documents.
C. The city finds that critical areas provide a variety of valuable and beneficial biological and physical functions that benefit the city and its residents, and/or may pose a threat to human safety or to public and private property. The beneficial functions and values provided by critical areas include but are not limited to water quality protection and enhancement, fish and wildlife habitat, food chain support, flood storage, conveyance and attenuation, ground water recharge and discharge, erosion control, wave attenuation, protection from hazards, historical and archaeological and aesthetic value protection, and recreation. These beneficial functions are not listed in order of priority.

D. Goals. By limiting development and alteration of critical areas, the SMP and this SMP Appendix seek to:
   1. Protect members of the public and public resources and facilities from injury, loss of life, or property damage due to landslides and steep slope failures, erosion, seismic events, volcanic eruptions, or flooding;
   2. Protect unique, fragile, and valuable elements of the environment, including ground and surface waters, wetlands, and fish and wildlife and their habitats;
   3. Direct activities not dependent on critical area resources to less ecologically sensitive sites and mitigate unavoidable impacts to critical areas by regulating alterations in and adjacent to critical areas;
   4. Prevent cumulative adverse environmental impacts to water quality, wetlands, and fish and wildlife habitat, frequently flooded areas and habitat conservation areas; and
   5. Implement the primary goal of achieving no net loss of wetland area, wetland functions and values, including lost time when the wetland doesn't perform its function,.

E. The city's enactment or enforcement of the SMP and this SMP Appendix shall not be construed for the benefit of any individual person or group of persons other than the general public

F. Organization. The chapters are organized by general requirements for all critical areas in B.1, followed by specific requirements for specific critical areas in the following chapters. The purpose in this organization is to reduce repetition, redundancy, and contradiction.

B.1.2 Jurisdiction – critical areas.

A. The city shall regulate all uses, activities, and developments within shoreline jurisdiction, consistent with best available science and the provisions of the SMP and this SMP Appendix.

B. Critical areas regulated by the SMP include (the city's geographic information service is a Pierce County service with a mapping program called CountyView):
   1. Wetlands as designated in Appendix Section B.2, Wetlands (CountyView map);
   2. Aquifer recharge areas as designated in Appendix Section B.3, Aquifer Recharge Areas (CountyView map);
   3. Frequently flooded areas as designated in Appendix Section B.4, Frequently Flooded Areas (CountyView map);
   4. Geologically hazardous areas as designated in Appendix Section B.5, Geologically Hazardous Areas (CountyView map); and
   5. Fish and wildlife habitat conservation areas as designated in Appendix Section B.6, Fish and Wildlife Habitat Conservation Areas (CountyView map).

C. All areas within the city shoreline that meet the definition of one or more critical areas, regardless of any formal identification, are hereby designated as potential critical areas and are subject to the provisions of the SMP and this SMP Appendix.

D. Mapping. The approximate location and extent of all known and/or suspected critical areas to include wetlands, aquifer recharge areas, frequently flooded areas, geologically hazardous areas and fish and wildlife habitat conservation areas may be depicted on the SMP maps, and are incorporated by reference:
   1. National Wetlands Inventory (CountyView map);
   2. Washington Department of Fish and Wildlife Priority habitat species maps (CountyView map);

3. Department of Natural Resources official water type reference maps, as amended (https://www.dnr.wa.gov/forest-practices-water-typing);

4. U.S. Geological Survey landslide hazard, seismic hazard and volcano hazard maps (https://store.usgs.gov/filter-products?country=US&region=WA&sort=relevance&lq=Buckley&page=1);
5. Department of Natural Resources seismic hazard maps for Western Washington (CountyView map);
6. Department of Natural Resources slope stability maps (geologyportal.dnr.wa.gov);
7. Federal Emergency Management Administration flood insurance maps (CountyView map);
8. City of Buckley water system map (CountyView map);
9. Locally adopted maps.

E. Additionally, soil maps produced by the United States Department of Agriculture National Resources Conservation Service may be useful in helping to identify potential critical areas. The above-referenced maps are to be used as a guide for the city, project applicants and/or property owners, and may be periodically updated as new critical areas are identified. They are a reference only and shall not be used to determine whether a parcel of land has or has not existing critical areas within its boundaries. The city will attempt to maintain a current inventory of the above-referenced maps.

B.1.3 Protection of critical areas.

To the extent consistent with the constitutional rights of a property owner, Any action taken pursuant to the SMP or this SMP Appendix shall result in equivalent or greater functions and values of the critical areas associated with the proposed action, as determined by the best available science. All actions and developments shall be designed and constructed in accordance with SMP **5.7.3.E.**1, and/or SMP Appendix Section B.1.13, Innovative mitigation, to minimize and mitigate all adverse impacts.

B.1.4 Best available science.

A. Protection for Functions and Values and Anadromous Fish. Critical areas report and decisions to alter critical areas shall include the best available science in order to protect the functions and values of critical areas and must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish and their habitat, such as salmon and bull trout.
B. Best Available Science to Be Used Must Be Consistent with Criteria. The best available science is that scientific information applicable to the critical area prepared by local, state or federal natural resource agencies, or a qualified scientific expert or team of qualified scientific experts that is consistent with criteria established in WAC 365-195-900 through 365-195-925.

   Whether a person is a qualified scientific expert with expertise appropriate to the relevant critical areas is determined by the person's professional credentials and/or certification, any advanced degrees earned in the pertinent scientific discipline from a recognized university, the number of years of experience in the pertinent scientific discipline, recognized leadership

in the discipline of interest, formal training in the specific area of expertise, and field and/or laboratory experience with evidence of the ability to produce peer-reviewed publications or other professional literature. No one factor is determinative in deciding whether a person is a qualified scientific expert. Where pertinent scientific information implicates multiple scientific disciplines, cities are encouraged to consult a team of qualified scientific experts representing the various disciplines to ensure the identification and inclusion of the best available science.

C. Characteristics of a Valid Scientific Process. In the context of critical areas protection, a valid scientific process is one that produces reliable information useful in understanding the consequences of a local government's regulatory decisions, and in developing critical areas policies and development regulations that will be effective in protecting the functions and values of critical areas. To determine whether information received during the permit review process is reliable scientific information, the city shall determine whether the source of the information displays the characteristics of a valid scientific process. Such characteristics are as follows:
    1. Peer Review. The information has been critically reviewed by other persons who are qualified scientific experts in that scientific discipline. The proponents of the information have addressed the criticism of the peer reviewers. Publication in a refereed scientific journal usually indicates that the information has been appropriately peer-reviewed;
    2. Methods. The methods used to obtain the information are clearly stated and replicated. The methods are standardized in the pertinent scientific discipline or, if not, the methods have been appropriately peer-reviewed to assure their reliability and validity;
    3. Logical Conclusions and Reasonable Inferences. The conclusions presented are based on reasonable assumptions supported by other studies and consistent with the general theory underlying the assumptions. The conclusions are logically and reasonably derived from the assumptions and supported by the data presented. Any gaps in information and inconsistencies with other pertinent scientific information are adequately explained;
    4. Quantitative Analysis. The data have been analyzed using appropriate statistical or quantitative methods;
    5. Context. The information is placed in proper context. The assumptions, analytical techniques, data, and conclusions are appropriately framed with respect to the prevailing body of pertinent scientific knowledge; and
    6. References. The assumptions, analytical techniques, and conclusions are well referenced with citations to relevant, credible literature and other pertinent existing information.

D. Nonscientific Information. Nonscientific information may supplement scientific information, but it is not an adequate substitute for valid and available scientific information. Common sources of nonscientific information include the following:
    1. Anecdotal Information. One or more observations that are not part of an organized scientific effort (for example, "I saw a grizzly bear in that area while I was hiking.");
    2. Non-expert Opinion. Opinion of a person who is not a qualified scientific expert in a pertinent scientific discipline (for example, "I do not believe there are grizzly bears in that area."); and
    3. Hearsay. Information repeated from communication with others (for example, "At a lecture last week, Dr. Smith said there were no grizzly bears in that area.").

B.1.5 Allowed activities.

A. Required Use of Best Management Practices.
   1. All allowed activities shall be conducted using the best management practices, adopted pursuant to the SMP and Chapter 14.30 BMC, Stormwater management, that result in the least amount of impact to the critical areas.
   2. Best management practices shall be used for tree and vegetation protection, construction management, erosion and sedimentation control, water quality protection, and regulation of chemical applications.
   3. The city shall observe the use of best management practices to ensure that the activity does not result in degradation to the critical area.
   4. Any incidental damage to, or alteration of, a critical area shall be restored, rehabilitated, or replaced in accordance with the SMP restoration plan at the responsible party's expense.

B. Allowed Activities. The following activities are allowed unless prohibited in the SMP:
   1. Permit Requests Subsequent to Previous Critical Areas Review. Development permits and approvals that involve both discretionary land use approvals (such as subdivisions, rezones, or conditional use permits), and construction approvals (such as building permits) if all of the following conditions have been met:
      a. The provisions of the SMP and this SMP Appendix are adequately addressed as part of another approval;
      b. No material changes are proposed in the potential impact to the critical area or buffer since the prior review;
      c. No new information is available that is applicable to any critical areas review of the site or particular critical area;
      d. The permit or approval is not expired; and
      e. Compliance with any standards or conditions placed upon the prior permit or approval was achieved or secured;
   2. Activities within the Improved Right-of-Way. Replacement, modification, installation, or construction of utility facilities, lines, pipes, mains, equipment, or appurtenances, not including substations, when such facilities are located within the improved portion of the public right-of-way or a city-authorized private roadway except those activities that alter a wetland or watercourse, such as culverts or bridges, or result in the transport of sediment or increased stormwater and are not prohibited by the SMP.
   3. Pedestrian Trails. Pedestrian trails, subject to the following:
      a. Private trails shall be limited to a maximum width of six feet and shall be surfaced with a pervious material such as bark, gravel, or a form of pervious concrete;
      b. Public trails shall be limited to the following maximum widths and construction standards:

Table B.1.5.B.3.b, Trail Type.

Trail Type	**Max. Surface Width**	**Surface Material**
Regional trails (i.e., Foothills Trail)	12 feet	Any, to include asphalt
Public pedestrian	8 feet	Any, to include asphalt
Interpretive trails	6 feet	Pervious or raised boardwalk

c. Impervious trails are to be placed in the outer quarter of the wetland buffer. Critical area and/or buffer widths shall be increased, where possible, equal to the width of the trail corridor, including disturbed areas; and
d. Trails proposed to be located in landslide or erosion hazard areas shall be constructed in a manner that does not increase the risk of landslide or erosion and in accordance with the SMP and an approved geotechnical report.

4. Select Vegetation Removal Activities. The following vegetation removal activities, provided the removal is in accordance with SMP 5.5 and no vegetation shall be removed from a critical area or its buffer without approval from the city:
   a. Removal of the following vegetation with hand labor and light equipment is allowed with a shoreline exemption unless the work does not meet the definition of an exemption:
      i. Invasive weeds;
      ii. Himalayan blackberry (Rubus discolor, R. procerus); and
      iii. Evergreen blackberry (Rubus laciniatus).
   b. The removal of trees that are hazardous, posing a threat to public safety, or posing an imminent risk of damage to private property, from critical areas and buffers, provided that:
      i. Tree cutting shall be limited to limbing, unless otherwise justified. Where limbing is not sufficient to address the hazard, trees should be either felled or if dead or dying, topped at no less than 30 feet to remove the hazard and leave the trunk for habitat;
      ii. All vegetation cut (tree stems, branches, tops, etc.) shall be left within the critical area or buffer unless removal is warranted because of potential disease transmittal to other healthy vegetation;
      iii. The landowner shall replace any trees that are felled with new trees at a ratio of one replacement tree for each tree felled or topped (1:1) within one year in accordance with a restoration plan developed in accordance with the SMP. Replacement trees shall be a minimum of two inches in caliper and be a coniferous species such as fir, cedar, spruce, etc;
      iv. If a tree to be removed provides critical habitat, such as an eagle perch, a qualified wildlife biologist shall be consulted to determine timing and methods of removal that will minimize impacts; and
      v. Hazard trees determined to pose an imminent threat or danger to public health or safety, or to public or private property, or serious environmental degradation may be removed prior to receiving written approval from the city, provided that within 14 days following such action the landowner shall submit a restoration plan that demonstrates compliance with the provisions of the SMP and this SMP Appendix.

5. Measures to control a fire or halt the spread of disease or damaging insects consistent with the State Forest Practices Act, Chapter 76.09 RCW; provided, that the removed vegetation shall be replaced in-kind or with similar native species within one year in accordance with an approved restoration plan. Unless otherwise provided or as a necessary part of an approved alteration, removal of any vegetation or woody debris from a habitat conservation area or wetland shall be prohibited.
6. Chemical Applications. The application of herbicides, pesticides or other hazardous substances in accordance with the SMP for reasons of public health and safety.
7. Minor Site Investigative Work. Work necessary for land use submittals, such as surveys, soil logs, percolation tests, and other related activities, where such activities do not require construction of new roads or excavation. In every case, impacts to the critical area shall be minimized and disturbed areas shall be immediately restored.
8. Navigational Aids and Boundary Markers. Construction or modification of navigational aids and boundary markers in accordance with the SMP.
9. Environmental Preservation. Conservation or preservation of soil, water, vegetation, fish, shellfish, and other wildlife in accordance with the SMP and that does not entail changing the structure or functions of the existing wetland.
10. Harvesting Wild Crops. The harvesting of wild crops in accordance with the SMP and in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, or alteration of the wetland by changing existing topography, water conditions or water sources.

B.1.6 Subdivisions and short subdivisions in critical areas.

A. Non-residential subdivision or short subdivision to transfer land ownership or to streamline non-residential uses shall be subject to the following:
    1. New lot lines may not be placed in the following locations:
        a. Within a wetland.
        b. Within an erosion or landslide hazard area.
        c. Within a mine hazard area.
    2. Each new lot and/or parcel created through the subdivision or short subdivision process shall:
        a. Maintain a minimum lot area not including a the critical area or its buffer of at least 75 percent of the minimum lot size area for the zoning district in which it is located.
        b. Contain sufficient buildable area in each resultant lot outside of, and not affecting, the critical area or its buffer.
        c. Contain uninterrupted habitat conservation areas and their buffers, except that pedestrian access ways may interrupt habitat conservation areas.
    3. Subdivisions and short subdivisions shall be designed to minimize or eliminate flood damage:
        a. Public utilities and facilities that are installed as part of a subdivision or short subdivision shall be located and constructed to minimize flood damage.
        b. Subdivisions and short subdivisions should be designed using natural features of the landscape, and shall not incorporate "flood protection" topographic changes.
    4. Subdivisions and short subdivisions shall have adequate natural surface water drainage in accordance with Chapter 14.30 BMC to reduce exposure to flood hazards.

5. In addition to other permit requirements in the SMP and subdivision ordinance, subdivisions and short subdivisions shall show the 100-year floodplain, floodway, channel migration zone, and base flood elevation data on the preliminary and final plat or short plat maps.
6. Access roads and utilities serving the proposed non-residential subdivision may be permitted conditionally within shoreline jurisdiction only if the city determines that no other feasible alternative exists and is consistent with the SMP and SMA.

B.1.7 City review process.

A. All associated wetlands are subject to review under the Shoreline Master Program.
B. All areas mapped as a possible associated wetland shall require a critical areas report and survey to verify the actual location of the wetland.
C. Any area that is determined not to be wetland shall be classified as within or outside the shoreline buffer in accordance with the SMP.

B.1.8 Critical areas report – requirements.

A. Prepared by Qualified Professional. If a shoreline use or development may affect a critical area, the applicant shall submit a critical areas report prepared by a qualified professional.
B. Incorporating Best Available Science. The critical areas report shall use scientifically valid methods and studies in the analysis of critical area data and field reconnaissance and reference the source of science used. The critical areas report shall evaluate the proposal and all probable impacts to critical areas in accordance with the provisions of the SMP and this SMP Appendix.
C. Minimum Report Contents. At a minimum, in addition to any information required by the SMP, the report shall contain the following:
    1. The name and contact information of the applicant, a description of the proposal, and identification of the permit requested;
    2. A copy of the site plan for the development proposal showing:
        a. Identified critical areas, buffers, and the development proposal with dimensions;
        b. Limits of any areas to be cleared; and
        c. A description of the proposed stormwater management plan for the development and consideration of impacts to drainage alterations.
    3. The dates and names of the persons preparing the report and documentation of any fieldwork performed on the site;
    4. Identification and characterization of all critical areas, wetlands, water bodies, and buffers adjacent to the proposed project area;
    5. A statement specifying the accuracy of the report, and all assumptions made and relied upon;
    6. An assessment of the probable cumulative impacts to critical areas resulting from development of the site and the proposed development and an opinion by the qualified professional addressing whether or not the project will result in no net loss of shoreline ecological of functions and values;
    7. A description of reasonable efforts made to apply mitigation sequencing pursuant to SMP **5.7.3.E.**1 to avoid, minimize, and mitigate impacts to critical areas;

8. Plans for adequate mitigation, as needed, to offset any impacts, in accordance with the SMP 5.7, SMP Appendix C, and Appendix Subsections B.1.12 and B.1.13, including but not limited to:
    1. The impacts of any proposed development within or adjacent to a critical area or buffer on the critical area; and
    2. The impacts of any proposed alteration of a critical area or buffer on the development proposal, other properties and the environment.
9. A discussion of the performance standards applicable to the critical area and proposed activity;
10. Financial guarantees to ensure compliance; and
11. Any additional information required for the critical area as specified in the corresponding requirements:

Wetlands	B.2.2
Aquifer Recharge Areas	B.3.5
Frequently Flooded Areas	B.4.2
Geologically Hazardous Areas	B.5.6
Fish & Wildlife Habitat Conservation Areas	B.6.2

B. Unless otherwise provided, a critical areas report may be supplemented by or composed, in whole or in part, of any reports or studies required by other laws and regulations or previously prepared for and applicable to the development proposal site, as approved by the city.

B.1.9 Critical areas report – modifications to requirements.

A. Limitations to Study Area. The city may limit the required geographic area of the critical areas report as appropriate if:
    1. The applicant, with assistance from the city, cannot obtain permission to access properties adjacent to the project area; or
    2. The proposed activity will affect only a limited part of the subject site.
B. Modifications to Required Contents. The applicant may consult with the city prior to or during preparation of the critical areas report to obtain city approval of modifications to the required contents of the report where, in the judgment of a qualified professional, more or less information is required to adequately address the potential critical area impacts and required mitigation.
C. Additional Information May Be Required. The city may require additional information to be included in the critical areas report when determined to be necessary to the review of the proposed activity in accordance with the SMP or this SMP Appendix. Additional information that may be required includes, but is not limited to:
    1. Historical data, including original and subsequent mapping, aerial photographs, data compilations and summaries, and available reports and records relating to the site or past operations at the site;
    2. Grading and drainage plans; and
    3. Information specific to the type, location, and nature of the critical area.

B.1.10 Mitigation requirements.

A. The applicant shall avoid and/or mitigate all impacts that degrade the functions and values of a critical area or areas. Unless otherwise provided in the SMP or this SMP Appendix, if alteration to the critical area is unavoidable, all adverse impacts to or from critical areas and buffers resulting from a development proposal or alteration shall be mitigated in accordance with an approved critical areas report, the SMP, SMP Appendix C, and SEPA documents.
B. Mitigation shall be in-kind and on-site, when possible, and sufficient to maintain the functions and values of the critical area, and to prevent risk from a hazard posed by a critical area.
C. Mitigation plans shall not affect adjacent properties by increasing wetland buffer widths or wetland classifications on the adjacent site.
D. Mitigation shall not be implemented until after city approval of a critical areas report and shoreline permit that includes a mitigation plan, and mitigation shall be in accordance with the provisions of the SMP, the shoreline permit, and the approved critical areas report.
E. Mitigation shall result in no net loss of shoreline functions and values.

B.1.11 Mitigation sequencing.

Applicants shall demonstrate that reasonable efforts have been examined with the intent to minimize impacts to critical areas. When an alteration to a critical area is proposed, such alteration shall be avoided, minimized, and mitigated in accordance with SMP **5.7.3.E.1.**

B.1.12 Mitigation plan requirements.

When critical area mitigation is required, the applicant shall submit for approval by the city a mitigation plan as part of the permit application and/or critical areas report. The mitigation plan shall be prepared by a qualified professional and in addition to any other requirement of the SMP and/or Appendix C and shall include:

A. Environmental Goals and Objectives. The mitigation plan shall include a written report identifying environmental goals and objectives of the compensation proposed and include:
    1. A description of the anticipated impacts to the critical areas and the mitigating actions proposed and the purposes of the compensation measures, including the site selection criteria; identification of compensation goals; identification of resource functions; proposed dates for beginning and completion of site compensation construction activities. The goals and objectives shall be related to the functions and values of the impacted critical area;
    2. A review of the best available science supporting the proposed mitigation and a description of the report author's experience to date in restoring or creating the type of critical area proposed; and
    3. An analysis of the likelihood of success of the compensation project.
B. Performance Standards. The mitigation plan shall include measurable specific criteria for evaluating whether or not the goals and objectives of the mitigation project have been successfully attained and whether or not the requirements of SMP are met.
C. Detailed Construction Plans. The mitigation plan shall include written specifications and descriptions of the mitigation proposed, such as:
    1. The proposed construction sequence, timing, and duration;
    2. Existing and proposed critical area acreage;
    3. Vegetative, faunal, and hydrologic conditions;

4. Relationship within watershed and to existing water bodies;
5. Soil and substrate conditions, topographic elevations;
6. Existing and proposed adjacent site conditions;
7. Required critical area buffers;
8. Property ownership;
9. Grading and excavation details;
10. Erosion and sediment control features;
11. A planting plan specifying plant species, quantities, locations, size, spacing, and density; and
12. Measures to protect and maintain plants until established.

These written specifications shall be accompanied by detailed site diagrams, scaled cross-sectional drawings, topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques or anticipated final outcome.

D. Monitoring Program. The mitigation plan shall include a program for monitoring construction of the compensation project, and for assessing a completed project. Monitoring programs prepared in order to comply with this section shall include the following:
   1. Procedures using quantitative and qualitative analysis for establishing the success or failure of the project;
   2. For vegetation determinations, permanent sampling points shall be established;
   3. Vegetative success shall equal 85 percent survival per year for planted trees, shrubs and/or cover of desirable under-story or emergent species;
   4. The applicant shall submit a monitoring report on the current status of the mitigation project to the city pursuant to the following schedule: upon immediate completion of the submitted planting plan; at the end of the first growing season after implementation of the planting plan; and annually thereafter at the end of each growing season for a period of five years; and
   5. If necessary, correct for failures by replacing dead or undesirable vegetation with appropriate plantings, repair damage caused by erosion, settling, or other geomorphologic processes or redesigning project. Correction procedures shall be approved by a qualified professional.
E. Contingency Plan. The mitigation plan shall include identification of potential courses of action, and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met.
F. Financial Guarantees. The mitigation plan shall include financial guarantees to ensure that the mitigation plan is fully implemented. Financial guarantees ensuring fulfillment of the compensation project, monitoring program, and any contingency measures shall be required pursuant to Appendix Subsection B.1.22.

B.1.13 Innovative mitigation.

A. The city may encourage, facilitate, and approve innovative mitigation projects for Class III and Class IV wetlands. Class II wetlands may be considered after review and approval through a shoreline conditional use permit. Advance mitigation or mitigation banking are examples of alternative mitigation projects allowed under the provisions of this section in which one or more applicants, or an organization with demonstrated capability, may

undertake a mitigation project together if it is demonstrated that in addition to any requirement of the SMP or SMP Appendix C all of the following circumstances exist:

1. Creation or enhancement of a larger system of critical areas and open space is preferable to the preservation of many individual habitat areas;
2. The applicant(s) demonstrates the organizational and fiscal capability to act cooperatively;
3. The applicant(s) demonstrates that long-term management of the habitat area will be provided; and
4. There is a clear potential for success of the proposed mitigation at the identified mitigation site.

B. Conducting mitigation as part of a cooperative process does not reduce or eliminate the required replacement ratios.

C. Any innovative mitigation project being considered under this section shall be required to satisfy the mitigation plan and monitoring requirements of Appendix Subsection B.1.12 and SMP Appendix C.

B.1.14 Review criteria.

A. Any alteration to a critical area that is authorized by the SMP, unless otherwise provided for in the SMP, shall be reviewed and approved, approved with conditions, or denied based on the proposal's ability to comply with all of the following criteria:

1. The proposal minimizes the impact on critical areas in accordance with SMP **5.7.3.E.**1 or complies with Appendix Subsection B.1.13, Innovative mitigation;
2. The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site;
3. The proposal is consistent with the general purposes of the SMP and the public interest;
4. Any alterations permitted to the critical area are mitigated in accordance with Appendix Subsection B.1.10, Mitigation requirements;
5. The proposal protects the critical area functions and values consistent with the best available science; and
6. The proposal is consistent with other applicable regulations and standards.

B. The city may condition the proposed activity as necessary to mitigate impacts to critical areas and to conform to the standards required by the SMP and provide for no net loss of shoreline functions and values.

C. Except as provided for by the SMP, any project that cannot adequately mitigate its impacts to critical areas shall be denied.

B.1.15 Completion of the critical areas review.

The city's determination regarding critical areas pursuant to the SMP shall be final concurrent with the final decision to approve, condition, or deny the development proposal or other activity involved.

B.1.16 Unauthorized critical area alterations and enforcement.

A. When a critical area or its buffer is altered in violation of the SMP or its appendixes, all ongoing development work shall stop and the critical area shall be restored. The city shall have the authority to issue a stop work order to cease all ongoing development work, and

order restoration, rehabilitation or replacement measures at the owner's or other responsible party's expense to compensate for violation of provisions of the SMP.

B. Restoration Plan Required. To the extent consistent with public safety all development work shall remain stopped until a restoration plan in accordance with the SMP and its appendixes is prepared and approved by the appropriate decision maker. Such a plan shall be prepared by a qualified professional and shall describe how the actions proposed meet the minimum requirements described in subsection B.1.16.C below. The city may, at the violator's expense, seek expert advice in determining the adequacy of the plan. Inadequate plans shall be returned to the applicant or violator for revision and resubmittal.

C. Minimum Performance Standards for Restoration.
   1. In addition to any requirement of the SMP or state laws, for alterations to aquifer recharge areas, frequently flooded areas, wetlands, and habitat conservation areas, the following minimum performance standards shall be met for the restoration of a critical area; provided, that if the violator can demonstrate that greater functional and habitat values can be obtained, these standards may be modified:
      a. The historic structural and functional values shall be restored, including water quality and habitat functions;
      b. The historic soil types and configuration shall be replicated;
      c. The critical area and buffers shall be replanted with native vegetation that replicates the vegetation historically found on the site in species types, sizes, and densities; and
      d. The historic functions and values should be replicated at the location of the alteration.
   2. In addition to other requirements of the SMP or state laws, for alterations to flood and geological hazards, the following minimum performance standards shall be met for the restoration of a critical area; provided, that if the violator can demonstrate that greater safety can be obtained, these standards may be modified:
      a. The hazard shall be reduced to a level equal to, or less than, the predevelopment hazard;
      b. Any risk of personal injury resulting from the alteration shall be eliminated or minimized; and
      c. The hazard area and buffers shall be replanted with native vegetation sufficient to minimize the hazard.

D. Site Investigations. To the extent authorized by law ,the city or designee is authorized to make site inspections and take such actions as are necessary to enforce the SMP. Any applicant as a condition of permit review shall grant to the city unlimited right of entry to the work site for the purposes of making inspections to determine compliance with the requirements and conditions of the review and/or issuance of said permit.

E. Penalties. Any person who violates any of the provisions of the SMP shall be guilty of a civil offense and subject to enforcement and penalty provisions of Chapter 1.12 BMC. For permits requested after the development is performed, or for restoration work that is required because a permit was not first requested before the work was done, the fee shall be triple that which is ordinarily charged, which will continue after the initial application is made (the hourly charge fees shall also be triple).

B.1.17 Critical area markers and signs.

A. The boundary at the outer edge of critical area tracts and easements shall be delineated with permanent survey stakes, using iron or concrete markers as established by local survey standards.
B. The boundary at the outer edge of the critical area or buffer shall be identified with temporary signs prior to any site alteration. Such temporary signs shall be replaced with permanent signs prior to occupancy or use of the site.

B.1.18 Notice on title.

A. In order to inform subsequent purchasers of real property of the existence of critical areas, the owner of any property containing a critical area or buffer on which a development proposal (e.g., short plat, long plat, subdivision, boundary line adjustment or other action that requires a land use permit) is submitted shall file a notice with the county according to the direction of the city. The notice shall state the presence of the critical area on the property, of the application of the SMP to the property, and the fact that limitations on actions in or affecting the critical area may exist. The notice shall run with the land.
B. Except for utilities working in easements, applicants shall submit proof that the notice is filed for public record before construction or use of the property or, in the case of subdivisions, short subdivisions, planned unit developments, and binding site plans, at or before recording.

B.1.19 Native growth protection areas.

A. Unless otherwise required in the SMP, native growth protection areas (NGPA) shall delineate and protect those contiguous critical areas and buffers listed below:
    1. All landslide hazard areas and buffers;
    2. All wetlands and buffers;
    3. All habitat conservation areas; and
    4. All other lands to be protected from alterations as conditioned by project approval.
B. Upon permit approval and/or development, native growth protection areas shall be recorded upon all affected lots.
C. Native growth protection areas shall be designated on the face of any plat or recorded drawing in a format approved by the city. The designation shall include the following restrictions:
    1. An assurance that native vegetation will be preserved for the purpose of preventing harm to property and the environment, including but not limited to controlling surface water runoff and erosion, maintaining slope stability, buffering, and protecting plants, fish, and animal habitat; and
    2. The right of the city to enforce the terms of the restriction.
    3. A statement that any alteration to or removal of the recorded native growth protective area shall be subject to the approval of the city.

B.1.20 Critical area tracts.

A. Critical area tracts shall be used in development proposals to delineate and protect those contiguous critical areas and buffers listed below:
    1. All landslide hazard areas and buffers;
    2. All wetlands and buffers;
    3. All habitat conservation areas; and

4. All other lands to be protected from alterations as conditioned by project approval.

B. Critical area tracts shall be recorded upon all affected lots.

C. Critical area tracts shall be designated on the face of the plat or recorded drawing in a format approved by the city. The designation shall include the following restriction:
   1. An assurance that native vegetation will be preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water runoff and erosion, maintaining slope stability, buffering, and protecting plants, fish, and animal habitat; and
   2. The right of the city to enforce the terms of the restriction.
   3. A statement subjecting any alteration to or removal of the recorded critical area tract to the approval of the city.

D. The city may require that any required critical area tract be dedicated to the city, held in an undivided interest by each owner of a building lot within the development with the ownership interest passing with the ownership of the lot, or held by an incorporated homeowner's association or other legal entity (such as a land trust, which assures the ownership, maintenance, and protection of the tract).

B.1.21 Building setbacks.

Unless otherwise provided, buildings shall be set back a distance of 15 feet from the edges of all critical area buffers or from the edges of all critical areas, if no buffers are required. The following may be allowed in the building setback area:

A. Landscaping, provided the plant material is not an invasive species per the Washington State Noxious Weed Control Board or Washington State Department of Agriculture (a list of class A through C noxious weeds is a brochure from the Washington State Noxious Weed Control Board (available at https://www.nwcb.wa.gov/printable-noxious-weed-list).

B. Building overhangs if such overhangs do not extend more than 18 inches into the setback area.

B.1.22 Bonds to ensure mitigation, maintenance, and monitoring.

A. When mitigation is required for a development permit, the city shall require the applicant to post a performance bond or other security in a form and amount deemed acceptable by the city. If the development proposal is subject to mitigation, the applicant shall post a mitigation/maintenance bond or other security in a form and amount deemed acceptable by the city to ensure mitigation is fully functional.

B. The performance bond shall be in the amount of 125 percent of the estimated cost of the uncompleted actions or the estimated cost of restoring the functions and values of the critical area that are at risk, whichever is greater. Upon satisfactory completion of the project, the performance bond shall be released and replaced with a required maintenance bond in the amount of 50 percent of the estimated cost of the completed project.

C. All bonds shall be in the form of a surety bond, performance bond, assignment of savings account, or an irrevocable letter of credit guaranteed by an acceptable financial institution with terms and conditions acceptable to the city attorney.

D. Bonds or other security authorized by this section shall remain in effect until the city determines in writing that the standards bonded for have been met. Maintenance bonds or other security shall be held by the city for a minimum of three years after project acceptance

by the city to ensure that the required mitigation has been fully implemented and demonstrated to function, and may be held for longer periods when necessary.

E. Depletion, failure, or collection of bond funds shall not discharge the obligation of an applicant or violator to complete required mitigation, maintenance, monitoring, or restoration.

F. Public development proposals shall be relieved from having to comply with the bonding requirements of this section if public funds have previously been committed for mitigation, maintenance, monitoring, or restoration.

G. Any failure to satisfy critical area requirements established by law or condition, including but not limited to the failure to provide a monitoring report within 30 days after it is due, or comply with other provisions of an approved mitigation plan, shall constitute a default and the city may demand payment of any financial guarantees or require other action authorized by the city code or any other law.

H. Any funds recovered pursuant to this section shall be used to complete the required mitigation.

B.1.23 Critical area inspections.

Reasonable access to the site shall be provided to the city, state, and federal agency review staff for the purpose of inspections during any proposal review, restoration, emergency action, or monitoring period to the extent a warrant is not legally required for such access. Reasonable access during permit review shall be deemed a precondition for approval of any development permits that have the potential to affect a critical area.

Appendix Section B.2
WETLANDS

Subsections:

B.2.1 Designation, rating and mapping wetlands.

A. Designating Wetlands. Wetlands are those areas, designated in accordance with the approved federal wetland delineation manual and applicable regional supplements as now or hereafter amended.

B. Wetland Ratings. Wetlands shall be rated according to the Department of Ecology wetland rating system found in the Washington State Wetland Rating System documents (Western Washington, Ecology Publication No. 14-06-029) or as revised by Ecology. These documents contain the definitions and methods for determining if the criteria below are met.

1. Wetland Rating Categories.
    a. Category I. Category I wetlands are those that (A) represent a unique or rare wetland type; or (B) are more sensitive to disturbance than most wetlands; or (C) are relatively undisturbed and contain ecological attributes that are impossible to replace within a

human lifetime; or (D) provide a high level of functions. The following types of wetlands are Category I:

i. Wetlands that perform many functions well (scoring 23 points or more);
ii. Wetlands of high conservation value that are identified by scientists of the Washington Natural Heritage Program (WNHP) or Washington Department of Natural Resources (WDNR);
iii. Bogs;
iv. Mature and old-growth forested wetlands larger than one acre;
v. Wetlands in coastal lagoons;
vi. Relatively undisturbed estuarine wetlands larger than one acre; or
vii. Interdunal wetlands that score 8 or 9 habitat points and are larger than one acre.

b. Category II. Category II wetlands are those not defined as Category I wetlands and include:
   i. Interdunal wetlands larger than one acre or those found in a mosaic of wetlands;
   ii. Estuarine wetlands smaller than one acre, or disturbed estuarine wetlands larger than one acre;
   iii. Wetlands with a moderately high level of functions (scoring between 20 and 22 points).

c. Category III. Category III wetlands are (A) wetlands with a moderate level of functions (scores between 16 and 19 points); (B) can often be adequately replaced with a well-planned mitigation project; and (C) interdunal wetlands between 0.1 and one acre in size. Wetlands scoring between 16-19 points generally have been disturbed in some ways, and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands.

d. Category IV. Category IV wetlands have the lowest levels of functions (scoring fewer than 16 points) and are often heavily disturbed. These are wetlands that we should be able to replace, or in some cases to improve. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions, and should be protected to some degree.

C. Mapping of Wetlands. The approximate location and extent of known and/or suspected wetlands are depicted on the following maps and hereby incorporated by reference into this Appendix and can be view at the Building & Planning office:
   (a) Washington Department of Fish and Wildlife Priority habitat species map; and
   (b) Department of Natural Resources official water type reference maps, as amended (https://www.dnr.wa.gov/forest-practices-water-typing); and
   (c) Department of Natural Resources state natural area preserves and natural resource conservation area maps.

D. The identification, classification, extent and location of any wetland shall be determined through the performance of a field investigation by a qualified consultant using the approved federal wetland delineation manual and applicable regional supplements.

B.2.2 Critical areas report – Additional requirements for wetlands.

In addition to the general critical areas report requirements of Appendix Subsection B.1.8, critical areas report for wetlands must meet the requirements of this section. Critical areas report

for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

A. Wetland Analysis. In addition to the minimum required contents of Appendix Subsection B.1.8, Critical areas report – Requirements, a critical areas report for wetlands shall contain an analysis of the wetlands including the following site-related and proposal-related information at a minimum:
    1. A written assessment and accompanying maps of the wetlands and buffers within 300 feet of the project area, including the following information at a minimum:
        a. The project area of the proposed activity;
        b. Wetland delineation and required buffers;
        c. Existing wetland acreage;
        d. Wetland category; vegetative, faunal, and hydrologic characteristics;
        e. Soil and substrate conditions; and
        f. Topographic elevations, at five-foot contours.
    2. Proposed mitigation including a written assessment and accompanying maps of the mitigation area, including the information detailed in Appendix Subsection B.1.12, Mitigation plan requirements.

B. Additional Information May Be Required. When appropriate, the city may also require the critical areas report to include an evaluation by the Department of Ecology or an independent qualified expert regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, and to include any recommendations as appropriate.

B.2.3 Performance standards – General requirements.

A. Activities may only be permitted in a wetland or wetland buffer if the applicant can show that the proposed activity will have no net loss to the functions and values of the wetland and other critical areas.
B. Activities and uses shall be prohibited in wetlands and wetland buffers, except as provided for in this SMP Appendix.
C. Category I Wetlands. Activities and uses shall be prohibited from Category I, except as provided in the city's SMP for trail development.
D. Category II. With respect to activities proposed in Category II wetlands, the following standards shall apply:
    1. Water-dependent activities as provided for under the city's shoreline master program may be allowed where there are no feasible alternatives that would not have a less adverse impact on the wetland, its buffers and other critical areas.
    2. Where non-water-dependent activities are proposed, it shall be presumed that alternative locations are available, and activities and uses shall be prohibited, unless the applicant demonstrates that:
        a. The basic project purpose cannot reasonably be accomplished and successfully avoid, or result in less adverse impact on, a wetland on another site or sites in the general region; and
        b. All alternative designs of the project as proposed, that would avoid, or result in less of an adverse impact on a wetland or its buffer, such as a reduction in the size, scope, configuration, or density of the project, are not feasible.
E. Category III and IV Wetlands. Activities and uses that result in unavoidable and necessary impacts may be permitted if the proposal demonstrates mitigation sequencing is followed.
F. Wetland Buffers.
    1. Land Use Intensity. Wetland buffers in the city of Buckley are determined based on the category of the wetland and the land use intensity proposed. Land use impact "intensity" is based on development types and the estimated impact based on the proposed change in land use.

Table B.2.3.F.1

Land Use Impact "Intensity" Based on Development Types

Level of impact from proposed change in land use	Types of land use based on zoning designations
High	Commercial, Urban, Industrial, Institutional, Retail sales, Residential (more than 1 unit/acre), Conversion to high-intensity agriculture (dairies, nurseries, greenhouses, growing and harvesting crops requiring annual tilling and raising and maintaining animals, etc, High-intensity recreation (golf courses, ball fields, etc.), Hobby farms
Moderate	Residential (1 unit/acre or less), Moderate-intensity open space (parks with biking, jogging, etc.), Conversion to moderate-intensity agriculture (orchards, hay fields, etc.), Paved trails, Building of logging roads, Utility corridor or right-of-way shared by several utilities and including access/maintenance road

Table B.2.3.F.1

Land Use Impact "Intensity" Based on Development Types

Level of impact from proposed change in land use	Types of land use based on zoning designations
Low	Forestry (cutting of trees only), Low-intensity open space (hiking, bird-watching, preservation of natural resources, etc.), Unpaved trails, Utility corridor without a maintenance road and little or no vegetation management

2. Buffer Widths. The city of Buckley establishes the following buffer widths based on category and land use intensity, as defined above. These buffer widths presume the existence of a relatively intact native vegetation community in the buffer zone adequate to protect the wetland functions and values at the time of the proposed activity. Required wetland buffers, based on wetland category and land use intensity, are as follows:

Table B.2.3.F.2

Alternative 2 Buffer Widths, Based Upon Category and Land Use Intensity

Category (2014 Wrn. WA Rating System)	Total Points in Rating System	Alternative 2 Buffer Category + Land Use Intensity (lo/mod/hi)
I	≥ 23	lo 150, mod 225, hi 300
II	20 – 22	lo 150, mod 225, hi 300
III	16 – 19	lo 75, mod 110, hi 150
IV	≤ 16	Lo 25, mod 40, hi 50

3. Measurement of Wetland Buffers. All buffers shall be measured on a horizontal plane from the wetland boundary as surveyed in the field. The width of the wetland buffer shall be determined according to the wetland category and the proposed land use. The buffer for a wetland created, restored, or enhanced as compensation for approved wetland alterations shall be the same as the buffer required for the category of the created, restored, or enhanced wetland.
4. Wetland Buffer Width Modifications. Permission will be in the form of an administrative variance for one of the following types of buffer width modification:
    a. The buffer widths recommended for land uses with "high intensity" impacts to wetlands can be reduced to those recommended for "moderate intensity" impacts under the conditions identified below.
        i. For wetlands that score moderate or high for habitat (6 points or more), the width of the buffer around the wetland can be reduced if the measures to minimize the impacts of different land uses on wetlands are applied (see Table B.2.3.G.4) for examples.
5. Buffer Uses. In addition to those allowed uses listed within the SMP and Appendix Section B.1.5, the following uses may be permitted within a wetland buffer in accordance with the review procedures of the SMP, provided they are not prohibited by any other

applicable law and they are conducted in a manner so as to have no net adverse impact on the buffer and adjacent wetland:

a. Conservation and Restoration Activities. Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife;
b. Passive Recreation. Passive recreation facilities designed and in accordance with an approved critical areas report and in the outer 25 percent of the wetland buffer, including:
    i. Walkways and trails, pursuant to Appendix Subsections B.1.5.D, and B.3.4;
    ii. Wildlife viewing structures; and
    iii. Fishing access areas.
c. Stormwater Management Facilities. Stormwater management facilities, limited to stormwater dispersion outfalls, detention facilities and bioswales, may be allowed; provided, that:
    i. Alternate locations were considered and shown to not be feasible as defined in the SMP;
    ii. The location of such facilities will not affect the net functions or values of the wetland; and
    iii. Stormwater detention facilities are not allowed in buffers of Category I or II wetlands.

G. Signs and Fencing of Wetlands.

1. Temporary Markers. The outer perimeter of the wetland or buffer and the limits of those areas to be disturbed pursuant to an approved permit or authorization shall be marked in the field in such a way as to ensure that no unauthorized intrusion will occur, and inspected by the city prior to the commencement of permitted activities. This temporary marking shall be maintained throughout construction, and shall not be removed until permanent signs, if required, are in place.
2. Permanent Signs. As a condition of any permit or authorization issued pursuant to the SMP, the city shall require the applicant to install permanent interpretative or educational signs along the boundary of a wetland or buffer in addition to wetland boundary signs.
    a. Permanent signs shall be made of a metal face and attached to a metal post, or another material of equal durability.
    b. Signs must be posted at a reasonable interval or of one per lot, and must be maintained by the property owner in perpetuity.
    c. Wetland boundary signs shall be worded as follows or with alternative language approved by the city:

> Protected Wetland Area
> Do Not Disturb
> Contact the City of Buckley Regarding Uses and Restriction

    d. Interpretative or educational signs shall be approved by the decision maker before approval of any permit.
3. Fencing.

a. The decision maker may require the applicant to install a permanent fence at the edge of the wetland buffer when fencing will prevent future impacts to the wetland.
b. The applicant shall install a permanent fence around the wetland or buffer when domestic grazing animals are present or may be introduced on-site.
c. Fencing installed as part of a proposed activity or as required in this subsection shall be designed so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that does not affect wetland and associated habitat.

4. The table that follows shows examples of measures to minimize impacts to wetlands from proposed changes in land use that have high impacts. (This is not a complete list of measures.

Table B.2.3.G.4 Impact minimization to shoreline wetlands

Disturbance	Required Measures to Minimize Impacts
Lights	• Direct lights away from wetland
Noise	• Locate activity that generates noise away from wetland • If warranted, enhance existing buffer with native vegetation plantings adjacent to noise source • For activities that generate relatively continuous, potentially disruptive noise, such as certain heavy industry or mining, establish an additional 10 ft heavily vegetated buffer strip immediately adjacent to the outer wetland buffer
Toxic runoff	• Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered • Establish covenants limiting use of pesticides within 150 ft of wetland • Apply integrated pest management
Stormwater runoff*	• Retrofit stormwater detention and treatment for roads and existing adjacent development • Prevent channelized flow from lawns that directly enters the buffer • Use low-intensity development techniques (for more information refer to Chapter 14.30 BMC and the Stormwater Management Manual)
Change in water regime	• Infiltrate or treat, detain and disperse into buffer new runoff from surfaces and new lawns
Pets and human disturbance	• Use privacy fencing or plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion • Place wetland and its buffer in a separate tract or protect with a conservation easement
Dust	• Use best management practices to control dust
** These Examples are not necessarily adequate for minimizing toxic runoff if threatened or endangered species are present at the site.*	

5. Wetland Buffer Width Averaging. Buffer averaging may not be used in conjunction with any of the other provisions for buffer reductions; and averaging to allow a reasonable use of a parcel may be permitted when all of the following are present:

    a. There are no feasible alternatives to the site design that could be accomplished without buffer averaging;
    b. The averaged buffer will not result in degradation of the wetland's functions and values as demonstrated by a report from a qualified professional;
    c. The total buffer area after averaging is equal to the area required without the averaging;
    d. The buffer at its narrowest point is never less than ¾ of the required width.

B.2.4 Performance standards – Mitigation requirements.

A. Mitigation shall achieve equivalent or greater biological functions. Mitigation for alterations to wetlands shall achieve equivalent or greater biologic functions and be in accordance with the SMP, this SMP Appendix, and the SMP restoration plan.
B. Mitigation shall result in no net loss. Wetland mitigation actions shall not result in a net loss of wetland area or functions and values and:
    1. The mitigation area results in a net gain in wetland functions as determined by a site-specific function assessment; or
    2. The mitigation area provides greater benefits to the functioning of the watershed, such as riparian habitat restoration and enhancement.
C. Preference of Mitigation Actions. Mitigation actions that require compensation by replacing, enhancing, or substitution shall occur in the following order of preference:
    1. Enhance on-site degraded wetlands.
    2. Restore wetlands on upland sites that were formerly wetlands and/or have been degraded.
    3. Create wetlands on disturbed upland sites such as those with a vegetative cover of primarily exotic or non-native species.
D. Mitigation Ratios.
    1. Acreage Replacement Ratios. The following ratios shall apply to creation or restoration that is in-kind, on-site, the same category, timed prior to or concurrent with alteration, and has a high probability of success. The first number specifies the acreage of replacement wetlands and the second specifies the acreage of wetlands altered. (Also see #5 below for a sample on reading this table.)

Table B.2.4.D Project mitigation ratios.

Category and type of wetland impact	Re-establishment or creation	Rehabilitation only	Re-establishment or creation (R/C) and Rehabilitation (RH)	Re-establishment or Creation (R/C) and Enhancement (E).	Enhancement only
All Category IV	1.5:1	3:1	1:1 R/C and 1:1 RH	1:1 R/C and 2:1 E	6:1
All Category III	2:1	4:1	1:1 R/C and 2:1 RH	1:1 R/C and 4:1 E	8:1
All other Category II	3:1	6:1	1:1 R/C and 4:1 RH	1:1 R/C and 8:1 E	12:1
Category I forested	6:1	12:1	1:1 R/C and 10:1 RH	1:1 R/C and 20:1 E	24:1
Category I – based on functional score	4:1	8:1	1:1 R/C and 6:1 RH	1:1 R/C and 12:1 E	16:1
Category I natural heritage site	Not considered possible	6:1 rehabilitation of a natural heritage site	R/C not considered possible	R/C not considered possible	Case-by-case
Category I Bog	Not considered possible	6:1 Rehabilitation of a bog	R/C not considered possible	R/C not considered possible	Case-by-case

E. Combining different types of compensation.

1. Establishing a mitigation ratio is straightforward when compensation projects involve one type of compensation and replace the wetland area lost (e.g. re-establishment or creation). When a proposal for compensation includes re-establishment or creation along with enhancement, two ratios are used to determine the total amount of compensation required. The fourth and fifth columns in Table *B.2.4.D* list the ratios required when these types of compensation are used in conjunction. Ratios are provided for each wetland category and type. When using these ratios, both the re-establishment/creation and the enhancement ratios listed are per area (acre) of impact.
2. As an example, when the column lists the ratios as "1:1 R/C and 8:1 E" it means that for every acre of impact an applicant would be required to provide 1 acre of re-establishment or creation and 8 acres of enhancement. For a 3-acre impact to a Category II categorized as "all other," the amount of compensation necessary would be three acres of creation/re-establishment plus 24 acres of enhanced wetland for a total area of 27 acres. Alternatively, in this scenario, the application could provide nine acres of re-establishment or creation (3:1 from column 2) to offset the three-acre loss.

F. Wetlands Enhancement as Mitigation.
1. Impacts to wetlands may be mitigated by enhancement of existing significantly degraded wetlands. Applicants proposing to enhance wetlands must produce a critical areas report that identifies how enhancement will increase the functions of the degraded wetland and how this increase will adequately mitigate for the loss of wetland area and function at the impact site. An enhancement proposal must also show whether existing wetland functions will be reduced by the enhancement actions.

Appendix Section B.3
AQUIFER RECHARGE AREAS

Subsections:

B.3.1 Aquifer recharge areas designation.

Aquifer recharge areas are those areas with a recharging effect on aquifers used for potable water as defined by WAC 365-190-32. Aquifer recharge areas have prevailing geologic conditions associated with infiltration rates that create a high potential for contamination of ground water resources or contribute significantly to the replenishment of ground water. These areas include the following:

A. Wellhead Protection Areas. Wellhead protection areas may be defined by the boundaries of the 10-year time of ground water travel, or boundaries established using alternate criteria

approved by the Department of Health in those settings where ground water time of travel is not a reasonable delineation criterion, in accordance with WAC 246-290-135.

B. Sole Source Aquifers. Sole source aquifers are areas that have been designated by the U.S. Environmental Protection Agency pursuant to the Federal Safe Drinking Water Act.

C. Susceptible Ground Water Management Areas. Susceptible ground water management areas are areas that have been designated as moderately or highly vulnerable or susceptible in an adopted ground water management program developed pursuant to Chapter 173-100 WAC.

D. Special Protection Areas. Special protection areas are those areas defined by WAC 173-200-090.

B.3.2 Aquifer recharge area susceptibility ratings.

Aquifer recharge areas shall be rated as having high, moderate, or low susceptibility based on soil permeability, geologic matrix, infiltration, and depth to water as determined by the criteria established by the State Department of Ecology.

B.3.3 Mapping of aquifer recharge areas.

The approximate location and extent of aquifer recharge areas are shown on the adopted critical area maps as referenced in Appendix Subsections B.1.2 D. and E.

A. Aquifer recharge areas are delineated on the water system map for source locations and WAC 246-290-135 shall be used to define the radius around them as the recharge area.

B.3.4 Activities allowed in aquifer recharge areas.

In addition to those allowed activities listed in Appendix Subsection B.1.5, the following activities are allowed in aquifer recharge areas:

A. Pervious and impervious trails

B.3.5 Critical areas report – Additional requirements for aquifer recharge areas.

In addition to the general critical areas report requirements of Appendix Subsection B.1.8, critical areas report for aquifer recharge areas must meet the requirements of this section. Critical areas report for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

A. Prepared by a Qualified Professional. An aquifer recharge area critical areas report shall be prepared by a qualified professional who is a hydrogeologist, geologist, or engineer, who is licensed in the State of Washington and has experience in preparing hydrogeologic assessments.
B. Hydrogeologic Assessment Required. For all proposed activities to be located in a aquifer recharge area, a critical areas report shall contain a level one hydrogeologic assessment. A level two hydrogeologic assessment shall be required for any of the following proposed activities:
    1. Activities that result in 5 percent or more impervious site area;
    2. Activities that divert, alter, or reduce the flow of surface or ground waters, or otherwise reduce the recharging of the aquifer;
    3. The use of hazardous substances, other than pesticides or herbicides approved by the Department of Ecology;
    4. The use of injection wells, including on-site septic systems; or
    5. Any other activity determined by the city likely to have an adverse impact on ground water quality or quantity, or on the recharge of the aquifer.
C. Level One Hydrogeologic Assessment. A level one hydrogeologic assessment shall include the following site-related and proposal-related information at a minimum:
    1. Available information regarding geologic and hydrogeologic characteristics of the site, including the surface location of all aquifer recharge areas located on-site or immediately adjacent to the site, and permeability of the unsaturated zone;
    2. Ground water depth, flow direction and gradient based on available information;
    3. Currently available data on wells and springs within 1,300 feet of the project area;
    4. Location of other critical areas, including surface waters, within 1,300 feet of the project area;

5. Available historic water quality data for the area to be affected by the proposed activity; and
6. Best management practices proposed to be utilized.

D. Level Two Hydrogeologic Assessment. A level two hydrogeologic assessment shall include the following site-related and proposal-related information at a minimum, in addition to the requirements for a level one hydrogeologic assessment:
   1. Historic water quality data for the area to be affected by the proposed activity compiled for at least the previous five-year period;
   2. Ground water monitoring plan provisions;
   3. Discussion of the effects of the proposed project on the ground water quality and quantity, including:
      1. Predictive evaluation of ground water withdrawal effects on nearby wells and surface water features; and
      2. Predictive evaluation of contaminant transport based on potential releases to ground water.
   4. A spill plan that identifies equipment and/or structures that could fail, resulting in an impact. Spill plans shall include provisions for regular inspection, repair, and replacement of structures and equipment that could fail.

B.3.6 Performance standards – General requirements.

A. Activities may only be permitted in a aquifer recharge area if the applicant can show that the proposed activity will not cause contaminants to enter the aquifer and that the proposed activity will not adversely affect the recharging of the aquifer.

B. The proposed activity must comply with the water source protection requirements and recommendations of the Federal Environmental Protection Agency, State Department of Health, and the local health district.

C. The proposed activity must be designed and constructed in accordance with Chapters 14.04 and 14.30 BMC and the City of Buckley Water Comprehensive Plan.

B.3.7 Performance standards – Specific uses.

A. Storage Tanks. All storage tanks proposed to be located in a aquifer recharge area must comply with local building code requirements and must conform to the following requirements:

   1. Underground Tanks. All new underground storage facilities shall be designed and constructed so as to:
      a. Prevent releases from corrosion or structural failure for the operational life of the tank;
      b. Be protected against corrosion, constructed of non-corrosive material, steel clad with a non-corrosive material, or designed to include a secondary containment system to prevent the release or threatened release of any stored substances; and
      c. Use material in the construction or lining of the tank that is compatible with the substance to be stored.

B. Above-ground Tanks. All new above-ground storage facilities proposed for use shall be designed and constructed so as to:
   1. Not allow the release to the ground, ground waters, or surface waters; Primary containment area enclosing or underlying the tank or part thereof; and
   2. A secondary containment system built into the tank structure.

C. Use of Pesticides and Nutrients. Application of pesticides, herbicides, and fertilizers shall be in accordance with Department of Ecology regulation or guidance documents. At a minimum, a shoreline exemption should be obtained from the city.

D. Spreading or Injection of Reclaimed Water. Water reuse projects for reclaimed water must be in accordance with the adopted water or sewer comprehensive plans that have been approved by the Departments of Ecology and Health.
   1. Surface spreading must meet the ground water recharge criteria given in RCW 90.46.8 and 90.46.1(10).
   2. Direct injection must be in accordance with the standards developed by authority of RCW 90.46.042.

E. State and Federal Regulations. The uses listed In Table B.3.6.E shall be conditioned as necessary to protect aquifer recharge areas in accordance with the applicable state and federal regulations.

Table B.3.6.E

Statutes, Regulations, and Guidance Pertaining to Ground Water Impacting Activities	
Activity	**Statute – Regulation – Guidance**
Above-ground storage tanks	WAC 173-303-640
Animal feedlots	Chapters 173-216 and 173-220 WAC
Automobile washers	Chapter 173-216 WAC; Best Management Practices for Vehicle and Equipment Discharges (WDOE WQ-R-95-56)
Below-ground storage tanks	Chapter 173-18 WAC
Chemical treatment storage and disposal facilities	WAC 173-303-182
Hazardous waste generator (boat repair shops, biological research facility, dry cleaners, furniture stripping, motor vehicle service garages, photographic processing, printing and publishing shops, etc.)	Chapter 173-303 WAC
Injection wells	Federal 40 CFR Parts 144 and 146; Chapter 173-218 WAC
Junk yards and salvage yards	Chapter 173-304 WAC; Best Management Practices to Prevent Stormwater Pollution at Vehicles Recycler Facilities (WDOE 94-146)
Oil and gas drilling	WAC 332-12-450, Chapter 173-218 WAC
On-site sewage systems (large-scale)	Chapter 173-240 WAC
On-site sewage systems (< 14,500 gal/day)	Chapter 246-272 WAC; local health ordinances
Pesticide storage and use	Chapters 15.54 and 17.21 RCW

Statutes, Regulations, and Guidance Pertaining to Ground Water Impacting Activities	
Sawmills	Chapters 173-303 and 173-304 WAC; Best Management Practices to Prevent Stormwater Pollution at Log Yards (WDOE 95-53)
Solid waste handling and recycling facilities	Chapter 173-304 WAC
Surface mining	WAC 332-18-015
Wastewater application to land surface	Chapters 173-216 and 173-200 WAC; WDOE Land Application Guidelines, Best Management Practices for Irrigated Agriculture

B.3.8 Uses prohibited from aquifer recharge areas.

The following activities and uses are prohibited in aquifer recharge areas:

A. Landfills. Landfills, including hazardous or dangerous waste, municipal solid waste, special waste, wood waste, and inert and demolition waste landfills;

B. Underground Injection Wells. Class I, III, and IV wells are prohibited; Class V injection wells may be permitted subject to the following:
   1. The application for the Class V injection well has undergone a review and received approval from the Washington State Department of Ecology and Pierce County Department of Health and has gone through and received approval through the variance process;

C. Wood Treatment Facilities. Wood treatment facilities that allow any portion of the treatment process to occur over permeable surfaces (both natural and manmade);

D. Storage, processing, or disposal of radioactive substances. Facilities that store, process, or dispose of radioactive substances; and

E. Other.
   1. Activities that would significantly reduce the recharge to aquifers currently or potentially used as a potable water source;
   2. Activities that would significantly reduce the recharge to aquifers that are a source of significant base flow to a regulated stream; or
   3. Activities that are not connected to an available sanitary sewer system are prohibited from aquifer recharge areas associated with sole source aquifers.

F. State and Federal Regulations. The uses listed in Table B.3.6.E shall be conditioned as necessary to protect aquifer recharge areas in accordance with the applicable state and federal regulations.

Appendix Section B.4
FREQUENTLY FLOODED AREAS

Subsections:

B.4.07 Definitions

In addition to the definitions in the Shoreline Master Program, the following definitions will be used for this chapter. Shoreline Master Program definitions are found in Chapter 2 SMP; to fully implement the federal flood management program, the following definitions are to be used in reviewing actions along the shoreline that are in floodplains or floodways and may be in addition to SMP requirements. The terms in this chapter and in the SMP are to be used in harmony with one another and applied to the extent necessary to assure no net loss of shoreline functions and values. In case of conflict or differences in definition between Chapter 2 SMP and the terms of this chapter, the differing/conflicting terms shall be applied in a manner that assures compliance with both the Shoreline Management Act and the federal flood management program. Chapter 2 SMP definitions shall prevail over the conflicting definitions of this chapter when use of the conflicting terms of this chapter are not necessary for compliance with federal flood management program regulations. In addition to the definitions in the Shoreline Master Program, the following definitions

A. Shoreline Master Program definitions are found in Chapter 2 SMP; to fully implement the federal flood management program, the following definitions are to be used in reviewing actions along the shoreline that are in floodplains or floodways and may be in addition to SMP requirements. The terms in this chapter and in the SMP are to be used in harmony with one another giving the greatest protection to the shoreline and its habitat as is possible.
B. “Development” for floodplain areas means any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials located within the area of special flood hazard.
C. “Elevation certificate” means the official form (FEMA Form 086-0-33) used to track development and provide elevation information necessary to ensure compliance with community floodplain management ordinances, and determine the proper insurance premium rate with Section B completed by community officials.
D. “Increased cost of compliance” means a flood insurance claim payment up to $30,000 directly to a property owner for the cost to comply with floodplain management regulations after a direct physical loss caused by a flood. Eligibility for an ICC claim can be through a single instance of “substantial damage” or as a result of a “cumulative substantial damage.” (More information can be found in FEMA ICC Manual 301.)
E. “Mobile home park or subdivision” means one of the following:

(a) “Existing manufactured home park or subdivision” means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by a community.

(b) “Expansion to an existing manufactured home park or subdivision” means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufacturing homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

(c) “New manufactured home park or subdivision” means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by a community.

F. “New construction” means structures for which the “start of construction” commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, new construction means structures for which the start of construction commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

G. “Start of construction” includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was within 180 days of the permit date. The “actual start” means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the “actual start of construction” means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

H. “Structure” means, for floodplain management purposes under shoreline jurisdiction, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

I. “Substantial damage” means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

J. “Substantial improvement” means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either:

(a) Before the improvement or repair is started; or

(b) If the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

K. This term "substantial improvement" can exclude:
   (a) Any project for improvement of a structure to correct pre-cited existing violations of state or local health, sanitary, or safety code specifications which have been previously identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or
   (b) Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

L. "Violation" for this chapter (floods) means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in § 60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4), or (e)(5) is presumed to be in violation until such time as that documentation is provided.

B.4.1 Designation of frequently flooded areas.

Frequently Flooded Areas. Frequently flooded areas shall include:

A. Areas Identified on the Flood Insurance Map(s). Those areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for the City of Buckley, Pierce County, Washington, dated March 7, 2017," as now or hereafter amended, with an accompanying flood insurance map(s), and any revisions thereto. The flood insurance study and accompanying map(s) are hereby adopted by reference, declared part of the SMP, and are available for public review at the city.

B. Areas Identified by the city. Those areas of special flood hazard identified by the city based on review of base flood elevation and floodway data available from federal, state, Pierce County or other valid sources when base flood elevation data has not been provided from the Federal Insurance Administration (A and V zones of the flood insurance map(s)).

C. Use of Additional Information. The city may use additional flood information that is more restrictive or detailed than that provided in the flood insurance study conducted by the Federal Emergency Management Agency (FEMA) to designate frequently flooded areas, including data on channel migration, historical data, high water marks, photographs of past flooding, location of restrictive floodways, maps showing future build-out conditions, maps that show riparian habitat areas, or similar information.

D. Flood Elevation Data. When base flood elevation data is not available (A and V zones), the city shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source in order to administer this section .

E. Designations. The flood insurance maps are to be used as a guide for the city, project applicants and/or property owners, and the public, and should be considered a minimum designation of frequently flooded areas. As flood insurance maps may be continuously updated as areas are reexamined or new areas are identified, newer and more restrictive information for flood hazard area identification shall be the basis for regulation.

F. Maintenance of Records. The city shall obtain and record the as-built elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement. The city shall also maintain for public inspection all records of floodplain hazards, certificates of floodproofing, and flood elevation data.

B.4.2 Critical areas report – Additional requirements.

In addition to the general critical areas report requirements of the SMP 5.3 and Appendix Subsection B.1.8, critical areas report for frequently flooded areas must meet the requirements of this section. Critical areas report for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

A. Prepared by a Qualified Professional. A frequently flooded areas report shall be prepared by a qualified professional who is a hydrologist, or engineer, who is licensed in the State of Washington with experience in preparing flood hazard assessments.

B. Area Addressed in Critical Areas Report. The following areas shall be addressed in a critical areas report for frequently flooded areas:
   1. The site area of the proposed activity;
   2. All areas of a special flood hazard area, as indicated on the flood insurance map(s) within 200 feet of the project area; and
   3. All other flood areas indicated on the flood insurance map(s) within 200 feet of the project area.

C. Flood Hazard Assessment Required. A critical areas report for a proposed activity within a frequently flooded area shall contain a flood hazard assessment including the following site-related and proposal-related information at a minimum:
   1. Site and Construction Plans. A copy of the site and construction plans for the development proposal showing:
      a. Floodplain (100-year flood elevation), 10-year and 50-year flood elevations, floodway, other critical areas, buffers, and shoreline areas;
      b. Proposed development, including the location of existing and proposed structures, fill, storage of materials, and drainage facilities, with dimensions indicating distances to the floodplain;
      c. Clearing limits; and
      d. Elevation of the lowest floor (including basement) of all structures, and the level to which any nonresidential structure has been floodproofed;
   2. Watercourse Alteration. When watercourse alteration is proposed, the critical areas report shall include:
      a. Extent of Watercourse Alteration. A description of and plan showing the extent to which a watercourse will be altered or relocated as a result of the proposal;
      b. Maintenance Program Required for Watercourse Alterations. A maintenance program that provides maintenance practices for the altered or relocated portion of the watercourse to ensure that the flood carrying capacity is not diminished; ***and***
      c. Compliance Documentation. Information describing and documenting how the proposed water course alteration complies with the requirements of Appendix Section B.6, Fish and Wildlife Habitat Conservation Areas, the SMP, and other applicable state or federal permit requirements.

3. Information Regarding Other Critical Areas. Potential impacts to wetlands, fish and wildlife habitat, and other critical areas shall be addressed in accordance with the applicable sections of the SMP and this SMP Appendix.

B.4.3 Warning and disclaimer of liability.

The degree of flood protection required is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. These regulations do not imply that land outside frequently flooded areas or uses permitted within such areas will be free from flooding or flood damages. These regulations shall not create liability on the part of the city, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on these regulations or any administrative decision lawfully made hereunder.

B.4.4 Performance standards – General requirements.

The following standards shall be adhered to in all frequently flooded areas, except as otherwise provide for in the SMP (e.g. SMP 5.3):

A. Development Permit Required. A shoreline permit shall be obtained before land is altered or a new use is commenced within a frequently flooded area. Development shall include storage of equipment or materials within the area of special flood hazard.
B. All Necessary Permits Shall Be Obtained. All necessary permits must be obtained from those governmental agencies from which prior approval is required by federal, state, or local law, including Section 404 of the Federal Water Pollution Control Act Amendment of 1972 and the Endangered Species Act of 1973.
C. Before Regulatory Floodway. In areas where the base flood elevation is provided, but where a regulatory floodway has not been designated, new construction, substantial improvements, or other development, including fill, shall not be permitted within zones A1 – 30 and AE, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.
D. Areas without Base Flood Elevation Data. Where base flood elevation data is not available (A and V zones), and there is insufficient data available from federal, state, or other sources, the city shall determine the base flood elevation using FEMA-approved engineering methods, and historical data, high water marks, photographs of past flooding, and other available information. If there is insufficient data available for the city to make a determination of the base flood elevation, and standards requiring a base flood elevation cannot be implemented, the city shall require measures that assure the proposed structures will be reasonably safe from flooding. At a minimum, the base flood elevation shall be set at least two feet above the highest adjacent grade.
E. Construction Materials and Methods.
    1. Methods That Minimize Flood Damage. All new construction and substantial improvements shall be constructed using flood-resistant materials and utility equipment, and with methods and practices that minimize flood damage.
    2. Structures shall be located outside the floodplain. All structures, utilities and other improvements located within the floodplain are required to go through the variance process for review and approval.

3. Utilities Shall Be Protected. Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

F. Elevation Certificate Required Following Construction. Following construction of a structure within the floodplain where the base flood elevation is provided, the applicant shall obtain an elevation certificate that records the elevation of the lowest floor. The elevation certificate shall be completed on a form provided by FEMA by a surveyor or engineer licensed in the State of Washington and shall be submitted to the city and Pierce County for recording.

G. Anchoring. All new construction and substantial improvements within the floodplain shall be anchored to prevent flotation, collapse, or lateral movement of the structure.

H. Fill and Grading. Fill and grading within the floodplain shall only occur upon a determination from a qualified professional that the fill or grading will not block side channels, inhibit channel migration, increase flood hazards to others, or be placed within a channel migration zone, whether or not the city has delineated such zones as of the time of the application. (Also please see SMP 6.10)

B.4.5 Performance standards – Specific uses.

Specific uses shall adhere to the following relevant standards, in addition to the general standards of Appendix Subsection B.4.4, Performance standards – General requirements.

A. Recreational Vehicles. Recreational vehicles are required to:
   1. Be on the site for fewer than 180 consecutive days;
   2. Be fully licensed and ready for highway use, on its wheels or jacking system, be attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; and/or
   3. Must obtain a development permit and meet the requirements, including elevation and anchoring, for manufactured homes.

B. Nonresidential Construction.
   1. Must Be Above Base Flood Elevation. New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated one foot or more above the base flood elevation, or, together with attendant utility and sanitary facilities, shall:
      a. Be floodproofed so that below one foot or more above the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
      b. Have structural components that shall be capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
      c. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Following construction of the structure, certifications shall be submitted to the city and Pierce County that record the actual (as-built) elevation to which the structure was floodproofed; and
      d. Applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the floodproofed level (for example, a building floodproofed to the base flood level will be rated as one foot below).

2. Areas Below the Lowest Floor. Fully enclosed areas below the lowest floor that are not floodproofed shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or must meet or exceed the following minimum criteria:
    a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;
    b. The bottom of all openings shall be no higher than one foot above grade; and
    c. Openings may be equipped with screens, louvers, or other coverings or devices; provided, that they permit the automatic entry and exit of floodwaters.

C. Utilities.
1. Shall Be Designed to Minimize Infiltration of Floodwaters. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems.
2. Sanitary Sewage Systems. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.
3. On-Site Waste Disposal Systems. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding. New on-site sewage disposal systems are prohibited pursuant to Appendix Section B.4.7, Uses and activities prohibited from frequently flooded areas.

D. Alteration of Watercourses.
1. Shall Be in Accordance with Habitat Regulations. Watercourse alterations shall only be allowed in accordance with the SMP and Appendix Section B.6, Fish and Wildlife Habitat Conservation Areas.
2. Shall Not Result in Blockage. Watercourse alteration projects shall not result in blockage of side channels.
3. Notification Required. The city shall notify adjacent communities, the State Department of Ecology, and the Federal Insurance Administration of the proposed watercourse alteration at least 30 days prior to permit issuance.
4. Maintenance of Alterations. The applicant shall maintain the altered or relocated portion of the watercourse to ensure that the flood carrying capacity is not diminished. Maintenance shall be bonded for a period of five years, and be in accordance with an approved maintenance program.

B.4.6 Performance standards – Areas of shallow flooding.

A. Uses in areas of shallow flooding shall adhere to the following standards, in addition to the general standards of the SMP and Appendix Subsection B.4.4, Performance standards – General requirements, and relevant specific standards of Appendix Subsection B.4.5, Performance standards – Specific uses.

B. Nonresidential Structures. New construction and substantial improvements of nonresidential structures within AO zones shall either:
1. Have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, one foot or more above the depth number specified on the flood insurance map or at least two feet if no depth number is specified; or

2. Together with attendant utility and sanitary facilities, be completely floodproofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Following construction of the structure, certifications shall be submitted to the city and Pierce County that record the actual (as-built) elevation to which the structure was floodproofed.

C. Drainage Paths. All development shall include adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

D. Recreational Vehicles. Recreational vehicles placed on sites within AO zones on the flood insurance map(s) shall meet the requirements of this section.

B.4.7 Uses and activities prohibited from frequently flooded areas.

A. Critical Facilities. Critical facilities are prohibited from frequently flooded areas.

B. Wells Used for Potable Water. Water wells used for potable water are prohibited from the floodway.

C. On-Site Sewage Disposal Systems. On-site sewage disposal systems are prohibited.

D. Construction in Floodways.

1. New Construction Requires Certification by an Engineer. Encroachments, including new construction, substantial improvements, fill, and other development, are prohibited within designated floodways unless certified by a registered professional engineer. Such certification shall demonstrate through hydrologic and hydraulic analyses, performed in accordance with standard engineering practice that the proposed encroachment will not result in any increase in flood levels during the occurrence of the base flood discharge.

2, Small projects that are solely to protect or create fish habitat and designed by a qualified professional may be allowed without certification if the city determines that the project will not obstruct flood flows.

Appendix Section B.5
GEOLOGICALLY HAZARDOUS AREAS

Subsections:

B.5.1 Designation of geologically hazardous areas.

Geologically hazardous areas include areas susceptible to erosion, sliding, earthquake, or other geological events. They pose a threat to the health and safety of citizens when incompatible development is sited in areas of significant hazard. Such incompatible development may not only place itself at risk, but also may increase the hazard to surrounding development and use. Areas susceptible to one or more of the following types of hazards shall be designated as geologically hazardous areas:

A. Erosion hazard;
B. Landslide hazard;
C. Seismic hazard;
D. Mine hazard;
E. Volcanic hazard; and
F. Other geological events including tsunamis, mass wasting, debris flows, rock falls, and differential settlement.

B.5.2 Designation of specific hazard areas.

A. Erosion Hazard Areas. Erosion hazard areas are at least those areas identified by the U.S. Department of Agriculture's Natural Resources Conservation Service as having a "moderate to severe," "severe," or "very severe" rill and inter-rill erosion hazard.
B. Landslide Hazard Areas. Landslide hazard areas are areas potentially subject to landslides based on a combination of geologic, topographic, and hydrologic factors. They include areas susceptible because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors. Examples of these may include but are not limited to, the following:
    1. Areas of historic failures, such as:
        a. Those areas delineated by the U.S. Department of Agriculture's Natural Resources Conservation Service as having a "severe" limitation for building site development;
        b. Those areas mapped by the Department of Ecology (Coastal Zone Atlas) or the Department of Natural Resources (slope stability mapping) as unstable ("U" or class 3), unstable old slides ("UOS" or class 4), or unstable recent slides ("URS" or class 5); or

c. Areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published by the U.S. Geological Survey or Department of Natural Resources.

2. Areas with all three of the following characteristics:
   a. Slopes steeper than 15 percent;
   b. Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and
   c. Springs or ground water seepage.
3. Areas that have shown movement during the Holocene epoch (from 10,000 years ago to the present) or that are underlain or covered by mass wastage debris of that epoch;
4. Slopes that are parallel or subparallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials;
5. Areas potentially unstable because of rapid stream incision, stream bank erosion, and undercutting by wave action; and/or
6. Any area with a slope of 40 percent or steeper and with a vertical relief of 10 or more feet except areas composed of consolidated rock. A slope is delineated by establishing its toe and top and measured by averaging the inclination over at least 10 feet of vertical relief.

C. Seismic Hazard Areas. Seismic hazard areas are areas subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement, soil liquefaction, lateral spreading, or surface faulting. One indicator of potential for future earthquake damage is a record of earthquake damage in the past. Ground shaking is the primary cause of earthquake damage in Washington.

D. Mine Hazard Areas. Mine hazard areas are those areas underlain by, or affected by, mine workings such as adits, gangways, tunnels, drifts, or airshafts, and those areas of probable sink holes, gas releases, or subsidence due to mine workings. Factors that should be considered include: proximity to development, depth from ground surface to the mine working, and geologic material.

E. Volcanic Hazard Areas. Volcanic hazard areas are areas subject to pyroclastic flows, lava flows, debris avalanche, inundation by debris flows, lahars, mudflows, or related flooding resulting from volcanic activity.

F. Other Hazard Areas. Geologically hazardous areas shall also include areas determined by the city to be susceptible to other geological events including mass wasting, debris flows, rock falls, and differential settlement.

B.5.3 Classification of geologically hazardous areas.

All geologic hazard areas should be classified according to the following categories for each geologic hazard type:

Table B.5.3 Classification of geological hazard areas.

Classification	Documentation and Data Sources
Known or Suspected Risk	Documentation or projection of the hazard by a qualified professional exists.
Risk Unknown	Documentation or projection by a qualified professional that a geologic hazard does not exist; or a statement by a qualified professional that data are not available to determine the presence or absence of a geologic hazard.

B.5.4 Mapping of geologically hazardous areas.

The approximate location and extent of geologically hazardous areas are shown on the adopted critical areas maps as referenced in Appendix Subsections B.1.2.D and E.

B.5.5 Activities allowed in geologically hazardous areas.

The following activities are allowed in geologically hazardous areas pursuant to Appendix Subsection B.1.5, Allowed activities, and do not require submission of a critical areas report:

A. Erosion and Landslide Hazard Areas. Except as otherwise provided for in the SMP, only those activities approved and permitted consistent with an approved critical areas report in accordance with the SMP shall be allowed in erosion or landslide hazard areas.
B. All Other Hazard Areas to Include Seismic, Mine, Volcanic and Other Hazard Areas. The following activities are allowed within all other hazard areas:
    1. Construction of new buildings with less than 2,500 square feet of floor area or roof area, whichever is greater, and which are not residential structures or used as places of employment or public assembly;
    2. Additions to existing single-story residences that are 250 square feet or less; and
    3. Installation of fences.

B.5.6 Critical areas report – Additional requirements for geologically hazardous areas.

A. Prepared by a Qualified Professional. A critical areas report for a geologically hazardous area shall be prepared by a geotechnical engineer or geologist, licensed in the State of Washington, with experience analyzing geologic, hydrologic, and ground water flow systems; or by a geologist who earns his or her livelihood from the field of geology and/or geotechnical analysis, with experience analyzing geologic, hydrologic and ground water flow systems, who has experience preparing reports for the relevant type of hazard.
B. Area Addressed in Critical Areas Report. The following areas shall be addressed in a critical areas report for geologically hazardous areas:
    1. The project area of the proposed activity; and
    2. All geologically hazardous areas within 200 feet of the project area or that have potential to be affected by the proposal.
C. Geotechnical Assessment. A critical areas report for a geologically hazardous area shall contain an assessment of geological hazards including the following site-related and proposal-related information at a minimum:
    1. Site and Construction Plans. The report shall include a copy of the site plans for the proposal showing:
        a. The type and extent of geologic hazard areas, and any other critical areas and buffers on, adjacent to, within 200 feet of, or that are likely to impact the proposal;
        b. Proposed development, including the location of existing and proposed structures, fill, storage of materials, and drainage facilities, with dimensions indicating distances to the floodplain;
        c. The topography, in two-foot contours, of the project area and all hazard areas addressed in the report; and
        d. Clearing limits.
    2. Assessment of Geological Characteristics. The report shall include an assessment of the geologic characteristics and engineering properties of the soils, sediments, and/or rock of

the project area and potentially affected adjacent properties, and a review of the site history regarding landslides, erosion, and prior grading. Soils analysis shall be accomplished in accordance with accepted taxonomic classification systems in use in the region. The assessment shall include but not be limited to:

a. A description of the surface and subsurface geology, hydrology, soils, and vegetation found in the project area and in all hazard areas addressed in the report;
b. A detailed overview of the field investigations, published data and references; data and conclusions from past assessments of the site; and site-specific measurements, test, investigations, or studies that support the identification of geologically hazardous areas; and
c. A description of the vulnerability of the site to seismic and other geologic events.

3. Analysis of Proposal. The report shall contain a geotechnical analysis including a detailed description of the project, its relationship to the geologic hazard(s), and its potential impact upon the hazard area, the subject property and affected adjacent properties; and
4. Minimum Buffer and Building Setback. The report shall make a recommendation for the minimum no-disturbance buffer and minimum building setback from any geologic hazard based upon the geotechnical analysis.

D. Incorporation of Previous Study. Where a valid geotechnical report has been prepared within the last five years for a specific site, and where the proposed land use activity and surrounding site conditions are unchanged, said report may be incorporated into the required critical areas report. The applicant shall submit a geotechnical assessment detailing any changed environmental conditions associated with the site.
E. Mitigation of Long-Term Impacts. When hazard mitigation is required, the mitigation plan shall specifically address how the activity maintains or reduces the preexisting level of risk to the site and adjacent properties on a long-term basis (equal to or exceeding the projected lifespan of the activity or occupation). Proposed mitigation techniques shall be considered to provide long-term hazard reduction only if they do not require regular maintenance or other actions to maintain their function. Mitigation may also be required to avoid any increase in risk above the preexisting conditions following abandonment of the activity.

B.5.7 Critical areas report – Additional requirements for specific hazards.

In addition to the general critical areas report requirements of Appendix Subsection B.1.8, critical areas report for geologically hazardous areas, of this SMP Appendix, must meet the requirements of this section. Critical areas report for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

A. Erosion and Landslide Hazard Areas. In addition to the basic critical areas report requirements, a critical areas report for an erosion hazard or landslide hazard area shall include the following information at a minimum:
   1. Site Plan. The report shall include a copy of the site plan for the proposal showing:
      a. The height of slope, slope gradient, and cross-section of the project area;
      b. The location of springs, seeps, or other surface expressions of ground water on or within 200 feet of the project area or that have potential to be affected by the proposal; and
      c. The location and description of surface water runoff.
   2. Geotechnical Analysis. The geotechnical analysis shall specifically include:
      a. A description of the extent and type of vegetative cover;

b. An estimate of load capacity including surface and ground water conditions, public and private sewage disposal systems, fills and excavations and all structural development;
c. An estimate of slope stability and the effect construction and placement of structures will have on the slope over the estimated life of the structure;
d. An estimate of the bluff retreat rate that recognizes and reflects potential catastrophic events such as seismic activity or a 100-year storm event;
e. Consideration of the run-out hazard of landslide debris and/or the impacts of landslide run-out on downslope properties;
f. A study of slope stability including an analysis of proposed angles of cut and fill and site grading;
g. Recommendations for building limitations, structural foundations, and an estimate of foundation settlement; and
h. An analysis of proposed surface and subsurface drainage, and the vulnerability of the site to erosion.

3. Erosion and Sediment Control Plan. The erosion and sediment control plan shall be prepared in compliance with requirements set forth in Chapter 14.30 BMC.
4. Drainage Plan. The report shall include a drainage plan for the collection, transport, treatment, discharge and/or recycling of water prepared in accordance with Chapter 14.30 BMC and the SMP. The drainage plan should consider neighboring septic system disposal volumes where the additional volume will affect the erosion or landslide hazard area.
5. Mitigation Plans. Hazard and environmental mitigation plans for erosion and landslide hazard areas shall be in accordance with the SMP and include the location and methods of drainage, surface water management, locations and methods of erosion control, a vegetation management and/or replanting plan and/or other means for maintaining long-term soil stability.
6. Monitoring Surface Waters. If the city determines that there is a significant risk of damage to downstream receiving waters due to potential erosion from the site, based on the size of the project, the proximity to the receiving waters, or the sensitivity of the receiving waters, the critical areas report shall include a plan to monitor the surface water discharge from the site. The monitoring plan shall include a recommended schedule for submitting monitoring reports to the city.

B. Seismic Hazard Areas. In addition to the basic report requirements, a critical areas report for a seismic hazard area shall also meet the following requirements:
1. The site map shall show all known and mapped faults within 200 feet of the project area or that have potential to be affected by the proposal; and
2. The geotechnical analysis shall include a complete discussion of the potential impacts of seismic activity on the site (for example, forces generated and fault displacement).

C. Mine Hazard Areas. In addition to the basic report requirements, a critical areas report for a mine hazard critical area shall also meet the following requirements:
1. Site Plan. The site plan shall delineate the following found within 200 feet of or directly underlying the project area, or that have potential to be affected by the proposal:
a. The existence of mines, including all significant mine features, such as mine entries, portals, adits, mine shafts, air shafts, and timber shafts;

b. The location of any nearby mines that may impact or be affected by the proposed activities;
c. The location of any known sinkholes, significant surface depressions, trough subsidence features, coal mine spoil piles and other mine-related surface features; and
d. The location of any prior site improvements that have been carried out to mitigate abandoned coal mine features.

2. Geotechnical Analysis. The geotechnical analysis shall include a discussion of the potential for subsidence on the site and classify all mine hazard areas within 200 feet of the project area, or that have potential to be affected by the proposal, as either moderate or severe.

D. Volcanic Hazard Areas. In addition to the basic report requirements, a critical areas report for a volcanic hazard area shall also meet the following requirements:
1. Site Plan. The site plan shall show all areas within 200 feet of the project area that have the potential to be affected by pyroclastic flows, lahars, or mud and debris flows derived from volcanic events;
2. Geotechnical Analysis. The geotechnical analysis shall include a complete discussion of the potential impacts of volcanic activity on the site (for example, inundation by mud flows resulting from volcanic activity); and
3. Emergency Management Plan. The emergency management plan shall include plans for emergency building exit routes, site evacuation routes, emergency training, notification of local emergency management officials, and an emergency warning system.

E. Other Geologically Hazardous Areas. In addition to the basic report requirements, the city may require additional information to be included in the critical areas report when determined to be necessary to the review of the proposed activity and the subject hazard.

B.5.8 Performance standards – General requirements.

A. Alterations of geologically hazardous areas or associated buffers may only occur for activities that:
1. Will not increase the threat of the geological hazard to adjacent properties beyond predevelopment conditions;
2. Will not adversely impact other critical areas;
3. Are designed so that the hazard to the project is eliminated or mitigated to a level equal to or less than predevelopment conditions; and
4. Are certified as safe as designed and under anticipated conditions by a qualified engineer or geologist licensed in the State of Washington.

B. Critical Facilities Prohibited. Critical facilities shall not be sited within geologically hazardous areas unless there is no other practical alternative.

B.5.9 Performance standards – Specific hazards.

A. Erosion and Landslide Hazard Areas. Activities on sites containing erosion or landslide hazards shall meet the following requirements:
1. Buffer Required. A minimum buffer of 25 feet shall be established from all edges of erosion or landslide hazard areas.
a. Increased Buffer. The city may increase the buffer requirement up to a distance equal to the height of the slope in order to minimize the risk of property damage, death or injury resulting from erosion and landslides caused in whole or part by the

development, based upon review of and concurrence with a critical areas report prepared by a qualified professional.

b. Buffer Reduction. The buffer may be reduced to a minimum of 10 feet from the top or toe of a slope when a qualified professional demonstrates to the city's satisfaction that the reduction will adequately protect the proposed development, adjacent developments and uses and the subject critical area.

2. Alterations. Alterations of an erosion or landslide hazard area and/or buffer may only occur for activities for which a geotechnical analysis is submitted and certifies that:
   a. The development will not increase surface water discharge or sedimentation to adjacent properties beyond predevelopment conditions;
   b. The development will not decrease slope stability on adjacent properties;
   c. Such alterations will not adversely impact other critical areas; and
   d. Geologic conditions associated with the alteration will not render the proposed development unsafe for use.
3. Design Standards. Development within an erosion or landslide hazard area and/or buffer shall be designed to meet the following basic requirements unless it can be demonstrated that an alternative design that deviates from one or more of these standards provides greater long-term slope stability while meeting all other provisions of the SMP. The requirement for long-term slope stability shall exclude designs that require regular and periodic maintenance to maintain their level of function. The basic development design standards are:
   a. The proposed development shall not decrease the factor of safety for landslide occurrences below the limits of 1.5 for static conditions and 1.2 for dynamic conditions. Analysis of dynamic conditions shall be based on a minimum horizontal acceleration as established by the current version of the Uniform Building Code;
   b. Structures and improvements shall be clustered to avoid geologically hazardous areas and other critical areas;
   c. Structures and improvements shall minimize alterations to the natural contour of the slope and foundations shall be tiered where possible to conform to existing topography;
   d. Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;
   e. The proposed development shall not result in greater risk or a need for increased buffers on neighboring properties;
   f. The use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes; and
   g. Development shall be designed to minimize impervious lot coverage.
4. Vegetation Shall Be Retained. Unless otherwise provided or as part of an approved alteration, removal of vegetation from an erosion or landslide hazard area or related buffer shall be prohibited.
5. Seasonal Restriction. Clearing shall be allowed only from May 1st to October 1st of each year; provided, that the city may extend or shorten the dry season on a case-by-case basis depending on actual weather conditions, except that timber harvest, not including brush clearing or stump removal, may be allowed pursuant to an approved forest practice permit issued by the city or the Department of Natural Resources.

6. Utility Lines and Pipes. Utility lines and pipes shall be permitted in erosion and landslide hazard areas only when the applicant demonstrates that no other practical alternative is available. The line or pipe shall be properly anchored and/or designed so that it will continue to function in the event of an underlying slide. Stormwater conveyance shall be allowed only through a high-density polyethylene pipe with fuse-welded joints, or a similar product that is technically equal to or superior.
7. Point Discharges. Point discharges from surface water facilities and roof drains onto or upstream from an erosion or landslide hazard area shall be prohibited except as follows:
    a. Conveyed via continuous storm pipe downslope to a point where there are no erosion hazard areas downstream from the discharge; and
    b. Discharged at flow durations matching predeveloped conditions, with adequate energy dissipation, into existing channels that previously conveyed stormwater runoff in the predeveloped state; or
    c. Dispersed discharge upslope of the steep slope onto a low-gradient undisturbed buffer demonstrated to be adequate to infiltrate all surface and stormwater runoff, and where it can be demonstrated that such discharge will not increase the saturation of the slope.
8. Subdivisions. The division of land in erosion and landslide hazard areas and associated buffers is subject to the following:
    a. Land that is located wholly within an erosion or landslide hazard area or its buffer may not be subdivided. Land that is located partially within an erosion or landslide hazard area or its buffer may be divided; provided, that each resulting lot has sufficient buildable area outside of, and will not affect, the erosion or landslide hazard or its buffer. Adequate building space means that each newly created lot shall maintain a minimum buildable lot area outside of the erosion or landslide hazard area which totals 75 percent of the minimum lot size area for the zoning district where located; and
    b. Access roads and utilities may be permitted within the erosion or landslide hazard area and associated buffers if the city determines that no other feasible alternative exists.
9. Prohibited Development. On-site sewage disposal systems, including drain fields, shall be prohibited within erosion and landslide hazard areas and related buffers.

B. Seismic Hazard Areas. Activities proposed to be located in seismic hazard areas shall meet the standards of Appendix Subsection B.5.8, Performance standards – General requirements.

C. Mine Hazard Areas.
1. Subdivisions. The division of land in mine hazard areas and associated buffers is subject to the following:
    a. Land that is located wholly within a mine hazard area or its buffer may not be subdivided. Land that is located partially within a mine hazard area or its buffer may be divided; provided, that each resulting lot has sufficient buildable area outside of, and will not affect, the mine hazard or its buffer. Adequate building space means that each newly created lot shall maintain a minimum buildable lot area outside of the mine hazard area which totals 75 percent of the minimum lot size area for the zoning district where located; and
    b. Access roads and utilities may be permitted within the mine hazard area and associated buffers if the city determines that no other feasible alternative exists.

2. Reclamation Activities. For all reclamation activities, including grading, filling, and stockpile removal, as-built drawings shall be submitted to the city in a format specified by the city.

D. Volcanic Hazard Areas. Activities on sites containing areas susceptible to inundation due to volcanic hazards shall require an evacuation and emergency management plan.

E. Other Hazard Areas. Activities on sites containing or adjacent to volcanic or other geologically hazardous areas shall meet the standards of Appendix Section B.5.8, Performance standards – General requirements.

Appendix Section B.6
FISH AND WILDLIFE HABITAT CONSERVATION AREAS

Subsections:

B.6.1 Designation of fish and wildlife habitat conservation areas.

A. Fish and wildlife habitat conservation areas include:
   1. Areas with which State or Federally Designated Endangered, Threatened, and Sensitive Species Have a Primary Association.
      a. The U.S. Fish and Wildlife Service and the National Marine Fisheries Service shall be consulted as necessary for current listing status.
      b. State-designated endangered, threatened, and sensitive species are periodically recorded in WAC 232-12-014 (state endangered species), and WAC 232-12-011 (state threatened and sensitive species). The State Department of Fish and Wildlife maintains the most current listing and shall be consulted as necessary for current listing status.
   2. All area within shoreline jurisdiction is a habitat conservation area.

B. Mapping of Habitat Conservation Areas. The approximate location and extent of habitat conservation areas are shown on the adopted critical area maps as referenced in Appendix Subsections B.1.2.D and E.

B.6.2 Critical areas report – Additional requirements for habitat conservation areas.

In addition to the general critical areas report requirements of SMP **5.7.3.E.**1, and Section B.1.8 of this SMP Appendix, critical areas report for habitat conservation areas must meet the requirements of this section. Critical areas report for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

A. Prepared by a Qualified Professional. A critical areas report for a habitat conservation area shall be prepared by a qualified professional who is a biologist with experience preparing reports for the relevant type of habitat.

B. Area Addressed in Critical Areas Report. The following areas shall be addressed in a critical areas report for habitat conservation areas:
   1. The project area of the proposed activity;

2. All habitat conservation areas and recommended buffers within 100 feet of the project area; and
3. All shoreline environments, floodplains, and other critical areas, and related buffers within 100 feet of the project area.

C. Habitat Assessment. A habitat assessment is an investigation of the project area to evaluate the presence or absence of a potential critical fish or wildlife species or habitat. A critical areas report for a habitat conservation area shall contain an assessment of habitats including the following site-related and proposal-related information at a minimum:
1. Detailed description of vegetation on and adjacent to the project area;
2. Identification of any species of local importance, priority species, or endangered, threatened, sensitive or candidate species that have a primary association with habitat on or adjacent to the project area, and assessment of potential project impacts to the use of the site by the species;
3. A discussion of any federal, state, or local special management recommendations, including Department of Fish and Wildlife habitat management recommendations, that have been developed for species or habitats located on or adjacent to the project area;
4. A detailed discussion of the potential impacts on habitat by the project, including potential impacts to water quality;
5. A discussion of measures, including avoidance, minimization and mitigation, proposed to preserve existing habitats and restore any habitat that was degraded prior to the current proposed land use activity and to be conducted in accordance with SMP **5.7.3.E.**1, and/or Appendix Section B.1.13, Innovative mitigation; and
6. A discussion of ongoing management practices that will protect habitat after the project site is developed, including proposed monitoring and maintenance programs.

D. Additional Information May Be Required. When appropriate due to the type of habitat or species present or the project area conditions, the city may also require the habitat management plan to include:
1. An evaluation by an independent qualified professional regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, to include any recommendations as appropriate;
2. A request for consultation with the Department of Fish and Wildlife or affected Indian tribe; and/or
3. Detailed surface and subsurface hydrologic features both on and adjacent to the site.

B.6.3 Performance standards – General requirements.

A. Alterations Shall Not Degrade the Functions and Values of Habitat. A habitat conservation area may be altered only if the proposed alteration of the habitat or the mitigation proposed does not degrade the quantitative and qualitative functions and values of the habitat, and results in no net loss to the functions and values of the shoreline area. All new structures and land alterations shall be prohibited from habitat conservation areas, except in accordance with the SMP.

B. Nonindigenous Species Shall Not Be Introduced. No plant, wildlife, or fish species not indigenous to the region shall be introduced into a habitat conservation area unless authorized by a state or federal permit or approval.

C. Mitigation Shall Result in Contiguous Corridors. Mitigation sites shall be located to achieve contiguous wildlife habitat corridors in accordance with a mitigation plan that is part of an

approved critical areas report to minimize the isolating effects of development on habitat areas, so long as mitigation of aquatic habitat is located within the same aquatic ecosystem as the area disturbed.

D. Approvals of Activities May Be Conditioned. The city shall condition approvals of activities allowed within or adjacent to a habitat conservation area or its buffers, as necessary to minimize or mitigate any potential adverse impacts. Conditions may include but are not limited to, the following:
    1. Establishment of buffer zones;
    2. Preservation of critically important vegetation;
    3. Limitation of access to the habitat area, including fencing to deter unauthorized access;
    4. Seasonal restriction of construction activities;
    5. Establishment of a duration and timetable for periodic review of mitigation activities; and
    6. Requirement of a performance bond, when necessary, to ensure completion and success of proposed mitigation.

E. Mitigation Shall Achieve Equivalent or Greater Biological Functions. Mitigation of alterations to habitat conservation areas shall achieve equivalent or greater biologic functions and shall include mitigation for adverse impacts upstream or downstream of the development proposal site. Mitigation shall address each function affected by the alteration to achieve functional equivalency or improvement on a per function basis.

F. Approvals shall be supported by the best available science.

G. Buffers.
    1. Establishment of Buffers. The city shall require the establishment of buffer areas for activities in, or adjacent to, habitat conservation areas when needed to protect habitat conservation areas. Buffers shall consist of an undisturbed area of native vegetation, or areas identified for restoration, established to protect the integrity, functions and values of the affected habitat. Required buffer widths shall reflect the sensitivity of the habitat and the type and intensity of human activity proposed to be conducted nearby, and shall be consistent with SMP 6.18 and Appendix Subsection B.1.4 of this SMP Appendix. Habitat conservation areas and their buffers shall be preserved in perpetuity through the use of native growth protection areas and critical area tracts in accordance with Appendix Subsection B.1.19 and B.1.20.
    2. Seasonal Restrictions. When a species is more susceptible to adverse impacts during specific periods of the year, seasonal restrictions may apply. Larger buffers may be required and activities may be further restricted during the specified season.
    3. Habitat Buffer Averaging. The city may allow the recommended habitat area buffer width to be reduced in accordance with a critical areas report, the best available science, and the management recommendations issued by the State Department of Fish and Wildlife, only if:
        1. It will not reduce stream or habitat functions;
        2. It will not adversely affect salmonid habitat;
        3. It will provide additional natural resource protection, such as buffer enhancement;
        4. The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and
        5. The buffer area width is not reduced by more than 25 percent in any location.

H. Signs and Fencing of Habitat Conservation Areas.

1. Temporary Markers. The outer perimeter of the habitat conservation area or buffer and the limits of those areas to be disturbed pursuant to an approved permit or authorization shall be marked in the field in such a way as to ensure that no unauthorized intrusion will occur, and verified by the city prior to the commencement of permitted activities. This temporary marking shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.
2. Permanent Signs. As a condition of any permit or authorization issued pursuant to the SMP, the city shall require the applicant to install permanent signs along the boundary of a habitat conservation area or buffer.
   a. Permanent signs shall be made of a metal face and attached to a metal post, or another material of equal durability. Signs must be posted at an interval of one per lot or every 100 feet, whichever is less, and must be maintained by the property owner in perpetuity. The sign shall be worded as follows or with alternative language approved by the director:

Habitat Conservation Area Do Not Disturb Contact the City of Buckley Regarding Uses and Restriction

3. Fencing.
   a. The city shall condition any permit or authorization issued pursuant to the SMP to require the applicant to install a permanent fence at the edge of the habitat conservation area or buffer when fencing will prevent future impacts to the habitat conservation area.
   b. The applicant shall be required to install a permanent fence around the habitat conservation area or buffer when domestic grazing animals are present or may be introduced on-site.
   c. Fencing installed as part of a proposed activity or as required in this subsection shall be designed so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes habitat impacts.

B.6.4 Performance standards – Specific habitats.

A. Endangered, Threatened, and Sensitive Species.
   1. No development except public trail development that is allowed through the SMP shall be allowed within a habitat conservation area or buffer with which state or federal endangered, threatened, or sensitive species have a primary association.
   2. Whenever activities are proposed on lands that contain or are adjacent to a habitat conservation area with which state or federally endangered, threatened, or sensitive species have a primary association, such area shall be protected through the application of protection measures in accordance with a critical areas report prepared by a qualified professional and approved by the City. (Also see Appendix Subsection B.1.8.) Approval for alteration of land adjacent to the habitat conservation area or its buffer shall not occur prior to consultation with the Department of Fish and Wildlife and the appropriate federal agency.
   3. Bald eagle habitat shall be protected pursuant to the Washington State Bald Eagle Protection Rules (WAC 232-12-292). Whenever activities are proposed on lands containing or adjacent to a verified nest territory or communal roost, a habitat management plan shall be developed by a qualified professional.

B. Anadromous Fish.
   1. All activities, uses, and alterations proposed to be located in water bodies used by anadromous fish or in areas that affect such water bodies shall give special consideration to the preservation and enhancement of anadromous fish habitat, including but not limited to adhering to the following standards:
      a. Activities shall be timed to occur only during the allowable work window as designated by the Department of Fish and Wildlife for the applicable species;
      b. An alternative alignment or location for the activity is not feasible;
      c. The activity is designed so that it will not degrade the functions or values of the fish habitat or other critical areas; and
      d. Any impacts to the functions or values of the habitat conservation area are mitigated in accordance with an approved critical areas report.
   2. Structures that prevent the migration of salmonids shall not be allowed in the portion of water bodies currently or historically used by anadromous fish. Fish bypass facilities shall be provided that allow the upstream migration of adult fish and shall prevent fry and juveniles migrating downstream from being trapped or harmed.
   3. Fills, when authorized by the SMP, shall not adversely impact anadromous fish or their habitat or shall mitigate any unavoidable impacts, and shall only be allowed for a water-dependent use.

C. Wetland Habitats. All proposed activities within or adjacent to habitat conservation areas containing wetlands shall conform to the wetland development performance standards set forth in this SMP Appendix. If non-wetlands habitat and wetlands are present at the same location, the provisions of the SMP and this SMP Appendix, or recommendations from state or federal agencies, whichever provides greater protection to the habitat, apply.

D. Riparian Habitat Areas (RHAs). Unless otherwise allowed in this SMP Appendix, all structures and activities shall be located outside of the riparian habitat area.
   1. Establishment of Riparian Habitat Areas. Riparian habitat areas shall be established for habitats that include aquatic and terrestrial ecosystems that mutually benefit each other,

and that are located adjacent to rivers, perennial or intermittent streams, seeps, and springs.

2. Riparian Habitat Area Widths. Recommended riparian habitat area widths are shown in the table below. A riparian habitat area shall have the width recommended, unless a greater width is required pursuant to Subsection B.6.4.D.3, or a lesser width is allowed pursuant to Subsection B.6.4.D.4. Widths shall be measured outward in each direction, on the horizontal plane, from the ordinary high water mark or from the top of bank if the ordinary high water mark cannot be identified. Riparian areas should be sufficiently wide to achieve the full range of riparian and aquatic ecosystem functions, which include but are not limited to protection of in-stream fish habitat through control of temperature and sedimentation in streams, preservation of fish and wildlife habitat, and connection of riparian wildlife habitat to other habitats.

Table B.6.4.D.2 Riparian habitat areas.

Stream type	Recommended RHA widths
Type S	150 feet
Type F	100 feet
Type Np	50 feet
Type Ns	25 feet

3. Increased Riparian Habitat Area Widths. The recommended riparian habitat area widths shall be increased, as follows:
   a. When the city determines on the basis of a report by a qualified professional that the recommended width is insufficient to prevent habitat degradation and no net loss of habitat functions and values, and to protect the structure;
   b. When the frequently flooded area exceeds the recommended riparian habitat area width, the riparian habitat area shall extend to the outer edge of the frequently flooded area;
   c. When the channel migration zone exceeds the recommended riparian habitat area width, the riparian habitat area shall extend to the outer edge of the channel migration zone; and/or
   d. When the habitat area is within an erosion or landslide hazard area, or buffer, the riparian habitat area shall be the recommended distance, or the erosion or landslide hazard area or buffer, whichever is greater.
4. Riparian Habitat Area Width Averaging. The city may allow the recommended riparian habitat area width to be reduced in accordance with a critical areas report only if:
   a. The width reduction will not reduce stream or habitat functions;
   b. The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer;
   c. The buffer width is not reduced to less than 25 percent of the standard width or 50 feet, whichever is greater, except for buffers in Class IV and V streams which are prohibited from averaging;

d. Buffer width averaging is being conducted and/or implemented within or on the property where the averaging is being requested;
e. The width reduction will not be located within another critical area or associated buffer; and
f. The reduced riparian habitat area width is supported by best available science.

5. Riparian Habitat Mitigation. Mitigation of adverse impacts to riparian habitat areas shall result in equivalent functions and values on a per function basis, be located as near the alteration as feasible, and be located in the same subdrainage basin as the habitat impacted.
6. Alternative Mitigation for Riparian Habitat Areas. The performance standards set forth in this subsection may be modified at the city's discretion if the applicant demonstrates that greater habitat functions, on a per function basis, can be obtained in the affected sub-drainage basin as a result of alternative mitigation measures.

E. Aquatic Habitat. Grading, clearing, and activities may be permitted by the SMP if the activity complies with the provisions set forth in the city's SMP and subject to the standards of this SMP Appendix. In the case of any inconsistency or conflict, the standards that provide the most protection to protected habitat and species shall apply.
1. Clearing and Grading. When clearing and grading is permitted as part of an authorized activity or as otherwise allowed in these standards, the activity will meet the requirements of SMP 5.5, Vegetation Conservation.